A Global Compact to End Poverty

Jeffrey Sachs on stabilisation, transition and weapons of mass salvation

Brian Snowdon

It is wrong that somebody's chances in life depend so starkly not on their talents or ambitions or how hard they work, but on where they were born. Those of us who believe that everyone—not just a few—should have the chance to fulfil their own potential, cannot stand by and watch Africa be left behind by the rest of the world.

Tony Blair: Speech at the Second Session of the Commission for Africa, Addis Ababa, October 7, 2004.

Our generation is heir to two and a half centuries of economic progress. We can realistically envision a world without extreme poverty by the year 2025 because technological progress enables us to meet basic human needs on a global scale and to achieve a margin above basic needs unprecedented in history... Remarkably, contrary to the dark vision of Thomas Malthus, we can accomplish all this with a world population that is eight times higher than in 1750.

Jeffrey D. Sachs, The End of Poverty, 2005.

Jeffrey D. Sachs is the Director of The Earth Institute, Quetelet Professor of Sustainable Development, and Professor of Health Policy and Management at Columbia University. He is also Director of the UN Millennium Project and Special Advisor to United Nations Secretary-General Kofi Annan on the Millennium Development Goals. Brian Snowdon is Principal Lecturer in Economics at Newcastle Business School, Northumbria University, Newcastle upon Tyne, UK.

INTRODUCTION

Jeffrey Sachs is one of the world's leading economists and is internationally renowned for his research, especially in the fields of monetary economics and international economic development. Professor Sachs spent over twenty years at Harvard University where he became Director of the Centre for International Development and Galen L. Stone Professor of International Trade. In 2002, Sachs moved to Columbia University to take up the post as Director of the prestigious Earth Institute¹ where he is also Quetelet Professor of Sustainable Development and Professor of Health Policy and Management. Currently he is a Special Advisor on the Millennium Development Goals to United Nations Secretary General Kofi Annan, and is Director of the UN Millennium Project. Previously, he has been a consultant to several international institutions including the IMF, the World Bank, the OECD, the World Health Organization, and the United Nations Development Program. During the last thirty years, he has also been an economic advisor to many governments in Latin America, Eastern Europe, the former Soviet Union, Asia, and Africa.²

In this article, I present the text of a two-hour interview conducted with Professor Sachs that provides a wide-ranging discussion relating to his work over the past thirty years on macroeconomic stabilisation, the economics of transition, and several important issues in the field of international economic development. First, I provide some background to the debate relating to Professor Sachs's most recent work that has helped focus international attention on the growth tragedy of sub-Saharan Africa (SSA). This key humanitarian issue has received enormous coverage in the media throughout 2005 and has been highlighted in particular at the recent G8 meetings in Gleneagles and worldwide Live 8 Concerts in early July, and the UN World Summit in September.

¹ The Earth Institute is a centre for research into the 'complex issues facing the planet and its inhabitants, with a particular focus on sustainable development and the needs of the world's poor'. Detailed information concerning the research activities of the Earth Institute can be found at http://www.earthinstitute.columbia.edu

² Professor Sachs is the author/co-author and editor of numerous books and hundreds of academic papers. Details of Professor Sachs's publications, many of which are available online, can be found at

http://www.earthinstitute.columbia.edu/about/director/index.html.

From Marshall Plan to Millennium Development Goals

In a historic speech delivered at Harvard University on June 5, 1947, US Secretary of State, George C. Marshall, set out the basic argument in support of what was to become the 'European Recovery Programme', more popularly known as the 'Marshall Plan':

Our policy is directed not against any country or doctrine, but against hunger, poverty, desperation, and chaos. Its purpose should be the revival of a working economy in the world so as to permit the emergence of political and social conditions in which free institutions can exist... With foresight, and a willingness on the part of our people to face up to the vast responsibility which history has clearly placed upon our country, the difficulties I have outlined can and will be overcome.

Learning from the disastrous failure of leadership at Versailles in 1919, the post-1947 US aid programme kick-started economic recovery and helped to put Western Europe back on its feet.³ Described by DeLong and Eichengreen (1993) as 'History's Most Successful Structural Adjustment Programme', the Marshall Plan became 'the model for future foreign aid programmes' (Kunz, *et al.*, 1997). Of course, the conditions prevailing in Western Europe in 1947 at the time of Marshall's speech were very different to those in contemporary SSA, and the prospects for a similar success for a coordinated international aid programme are very controversial. However, the general principles underlying Marshall's plea for the US population to support the implementation of an enlightened policy against 'hunger, poverty, desperation, and chaos' has been echoed during the last decade in the writings and speeches of Jeffrey Sachs with respect to the measures that he believes are needed to end extreme poverty in the developing world.

Following the *Millennium Development Summit* in 2000, 189 member states of the United Nations unanimously supported the *Millennium Declaration* committing the international community to creating 'an environment—at the national and global levels alike—which is conducive to development and to the elimination of poverty'. The UN Millennium Declaration provides a commitment to freeing the entire human race from extreme poverty. From this declaration emerged the *Millennium*

³ The total aid package between April 1948 and June 1951 amounted to \$12.5 billion.

Development Goals (MDGs), a set of measurable objectives aimed at halving global poverty by 2015, compared to 1990, that have now been generally accepted as a framework for assessing progress in the developing countries.⁴ The eight MDGs are as follows:⁵

- 1. Eradicate extreme poverty and hunger.
- 2. Achieve universal primary education.
- 3. Promote gender equality and empower women.
- 4. Reduce child mortality.
- 5. Improve maternal health.
- 6. Combat HIV/AIDS, malaria and other diseases.
- 7. Ensure environmental sustainability.
- 8. Develop a global partnership for development.

While goals 1–7 are directed at reducing poverty in all its manifestations, goal 8 is about establishing the means to achieve poverty alleviation and includes a commitment from the developed countries to reduce trade barriers, provide generous debt relief and substantially increase the flow of aid.

The sub-Saharan Africa growth tragedy

According to Sachs, there is now a 'stark realisation' that 'many of the poorest regions of the world, most notably in SSA, are far off track to achieve the MDGs' (United Nations, 2005).⁶ As Tables 1 and 2 indicate, SSA is the region of the world that appears to have the most intractable development problems.

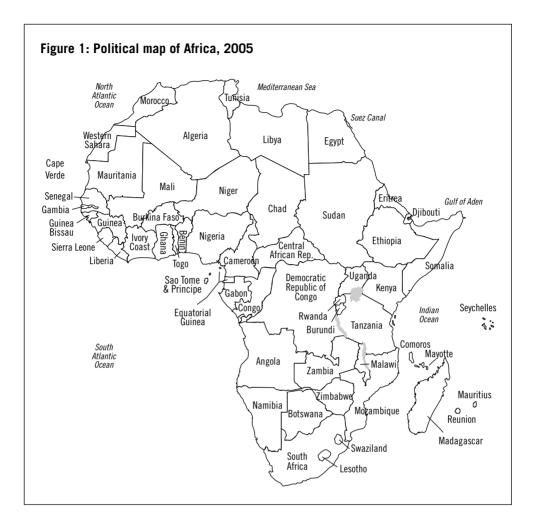
Of 59 countries classified by the World Bank as low income, 37 are in SSA, and of the 48 countries of SSA only four are classified as lower middle income (LMI), and seven as upper middle income (UMI).

⁴ The MDGs were reaffirmed at the Monterrey (Mexico) Conference on Financing for Development in March, 2002, and the World Summit on Sustainable Development at Johannesburg in September, 2002.

^{&#}x27;The Monterrey Consensus' emphasises the mutual role of both developed and developing countries in achieving the MDGs. As well as recognising the need for more development aid, debt relief and a more open trading system, the Monterrey Consensus also explicitly recognises that 'developing countries have primary responsibility for their own development, and that good governance and a sound development-friendly economic strategy are paramount' (Kofi Annan).

⁵ To view the full United Nations document on the Millennium Development Goals, definitions, sources and methodology, go to http://www.undp.org

⁶ www.globalfutureonline.org, second quarter, 2005.



Collectively, the 11 LMI and UMI countries have a population of just over 68 million out of the total for SSA of 719 million. Over 59 million of those in LMI and UMI countries live in either Angola or South Africa, countries not noted for their equitable income distribution. To get some idea of the scale of the SSA economy, it is interesting to compare California with SSA. In 2004, the US Bureau of Economic Analysis⁷ estimates the Gross State Product of California to have been \$1,438,737 million, approximately equivalent to the output of SSA in total!

⁷ http://www.bea.doc.gov/

Table 1: Selected development indicators: countries, income groups and world regions $^{1} \ \ \,$

Country, income group or region	GNI per capita ¹ (\$US) 2004	GNI per capita ¹ (\$PPP) 2004	GDP ¹ (\$PPP millions) 2004	Population ¹ (thousands) 2004	Human Development Index ² 2003
Low income	510	2,260	5,350,327	2,338,083	0.593
Middle income Lower middle income Upper middle income	2,190 1,580 4,770	6,480 5,640 10,090	19,729,421 13,800,110 5,968,207	3,006,230 2,430,310 575,920	0.774 NA NA
Low and middle income	1,460	4,630	25,070,850	5,334,313	NA
High income	32,040	30,970	31,004,190	1,000,814	0.910
East Asia and Pacific	1,280	5,070	9,458,791	1,870,228	0.768
Europe and Central Asia	3,290	8,360	4,037,790	472,073	0.802 ³
Latin America and Caribbean	3,600	7,660	4,286,169	541,322	0.797
Middle East and North Africa	2,000	5,760	1,718,585	293,994	0.679 ⁴
South Asia	590	2,830	4,115,428	1,447,673	0.628
Sub-Saharan Africa	600	1,850	1,407,349	719,022	0.515
European Monetary Union	27,630	27,840	8,638,455	307,446	NA
World	6,280	8,760	55,938,191	6,345,127	0.741
USA	41,400	39,710	11,628,083	293,507	0.944
UK	33,940	31,460	1,832,252	59.405	0.939
Japan	37,180	30,040	3,774,086	127,764	0.943
Germany	30,120	27,950	2,325,828	82,631	0.930
China	1,290	5,530	7,123,712	1,296,500	0.755
India	620	3,100	3,362,960	1,079,721	0.602

Notes

¹ World Bank Data. Country classification by income group: Economies are divided according to 2004 GNI per capita, calculated using the World Bank Atlas method. The groups are: low income, \$825 or less; lower middle income (LMI), \$826–\$3,255; upper middle income (UMI), \$3,256–\$10,065; and high income, \$10,066 or more (www.worldbank.org).

² United Nations Development Programme classifications. Adapted from the *Human Development Report*, 2005, United Nations

(www.undp.org).

³ Central and Eastern Europe and CIS.

⁴ Arab States.

Country classification ¹	GNI per capita ¹ (\$US) 2004	GNI per capita ¹ (\$PPP) 2004	Population ¹ (thousands) 2004	Life expectancy at birth ¹ 2002	Under 5 mortality rate per thousand 2002 ¹	HDI ² 1985	HDI ² 2003
Angola (LMI)	1,030	2,030	13,963	47	260	NA	0.445
Benin	530	1,120	6,890	53	151	0.362	0.431
Botswana (UMI)	4,340	8,920	1,727	38	110	0.638	0.565
Burkino Faso	360	1,220	12,387	43	207	0.297	0.317
Burundi	90	660	7,343	42	208	0.345	0.378
Cameroon	800	2,090	16,400	48	166	0.505	0.497
Cape Verde (LMI)	1,770	5,650	481	69	38	NA	0.721
Central African Rep.	310	1,110	3,947	42	180	0.386	0.355
Chad	260	1,420	8,823	48	200	0.311	0.341
Comoros	530	1,840	614	61	79	0.498	0.547
Congo Dem. Rep.	120	680	54,775	45	205	0.431	0.385
Congo Republic.	770	750	3,855	52	108	0.540	0.512
Cote d'Ivoire	770	1,390	17,142	45	191	0.448	0.420
Equatorial Guinea (UMI)	NA	7,400	506	52	152	0.483	0.655
Eritrea	180	1,050	4,477	51	80	NA	0.444
Ethiopia	110	810	69,961	42	171	0.291	0.367
Gabon (UMI)	3,940	5,600	1,374	53	85	NA	0.635
Gambia	290	1,900	1,449	53	126	NA	0.470
Ghana	380	2,280	21,053	55	97	0.482	0.520
Guinea	460	2,130	8,073	46	165	NA	0.466
Guinea-Bissau	160	690	1,533	45	211	0.283	0.348
Kenya	460	1,050	32,447	46	122	0.530	0.474
Lesotho	740	3,210	1,809	38	132	0.534	0.497
Liberia	110	NA	3,449	47	235	NA	NA
Madagascar	300	830	17,332	55	135	0.436	0.499

. . . . **...**: . . . 10 C-L . . .

Table 2: Selected development indicators, 48 sub-Saharan countries

Country classification ¹	GNI per capita ¹ (\$US) 2004	GNI per capita ¹ (\$PPP) 2004	Population ¹ (thousands) 2004	Life expectancy at birth ¹ 2002	Under 5 mortality rate per thousand 2002 ¹	HDI ² 1985	HDI ² 2003
Malawi	170	620	11,182	38	182	0.362	0.404
Mali	360	980	11,937	41	222	0.263	0.333
Mauritania	420	2,050	2,906	51	183	0.384	0.477
Mauritius (UMI)	4,640	11,870	1,234	73	19	0.690	0.791
Mayotte (UMI)	NA	NA	172	60	NA	NA	NA
Mozambique	250	1,160	19,129	41	205	0.287	0.379
Namibia (LMI)	2,370	6,960	2,033	42	67	NA	0.627
Niger	230	830	12,095	46	264	0.242	0.281
Nigeria	390	930	139,823	45	201	0.386	0.453
Rwanda	220	1,300	8,412	40	203	0.401	0.450
Sao Tome-Principe	370	NA	161	66	118	NA	0.604
Senegal	670	1,720	10,455	52	138	0.375	0.458
Seychelles (UMI)	8,090	15,590	85	73	16	NA	0.821
Sierra Leone	200	790	5,436	37	284	NA	0.298
Somalia	NA	NA	9,938	47	225	NA	NA
South Africa (UMI)	3,630	10,960	45,584	46	65	0.702	0.658
Sudan	530	1,870	34,356	58	94	0.396	0.512
Swaziland (LMI)	1,660	4,970	1,120	44	149	0.584	0.498
Tanzania	330	660	36,571	43	165	NA	0.418
Togo	380	1,690	4,966	50	140	0.474	0.512
Uganda	270	1,520	25,920	43	141	0.412	0.508
Zambia	450	890	10,547	37	182	0.484	0.394
Zimbabwe	480 ³	2,180	13,151	39	123	0.640	0.505
Sub Saharan Africa	600	1,850	719,022	46	174	NA	0.515
World	6,280	8,760	6,345,127	67 ⁴	814	NA	0.741

Notes on data:

1 Source: World Bank Data (www.worldbank.org). Djibouti is classified by the World Bank as being part of Middle East/North Africa.

2 Source: Human Development Report, 2005, United Nations (www.undp.org).

3 World Bank data for 2003.

4 Weighted average.

2005: A 'pivotal year'?

Given the enormous development task facing SSA, Sachs believes that 2005 marks a pivotal 'make or break' year in terms of international efforts to fight extreme poverty.⁸ Throughout 2005 we have witnessed several major events that have raised the profile of the 'SSA tragedy', specifically:

- January: publication of the findings of the Millennium Development Project (MDP)
- March: publication of the Commission for Africa report
- March: publication of Jeffrey Sachs's book, The End of Poverty
- July: G8 Summit at Gleneagles and Live 8 Concerts worldwide
- September: UN World Summit.

The Millennium Development Project

In 2002 the MDP was commissioned by UN Secretary-General, Kofi Annan, and sponsored by the United Nations Development Programme.⁹ The objective of this independent project, under the directorship of Jeffrey Sachs, was to set out the best strategies and sector-specific proposals for achieving the MDGs by 2015.¹⁰ The findings and recommendations of the MDP were presented to Kofi Annan on 17th January 2005 in a progress report entitled, Investing in Development: A Practical Plan to Achieve the Millennium Development Goals (see Sachs et al., 2005). This report is a comprehensive attempt to assess how much progress has been made towards achieving the MDGs and also provides a practical operational framework to help facilitate an investment strategy that will assist the poorest countries to achieve the MDGs by 2015. More specifically, the MDP sets out a detailed plan of action that aims to half the rate of extreme global poverty by 2015, compared to 1990. According to Sachs, the total aid requirements necessary to finance the investments in health, education, infrastructure, sanitation, and other key areas, is around \$160 billion per

⁸ Paul Wolfowitz, President of the World Bank, regards the development problems of SSA as *the* top priority of the development agenda.

⁹ www.unmillenniumproject.org

¹⁰ The MDP consisted of 10 thematically-oriented task forces involving 300 experts from around the world.

year. This is double the current aid budget and represents approximately 0.5% of the combined GNP of the developed donor nations.¹¹

The Commission for Africa

The Commission for Africa¹² was initiated by British Prime Minister Tony Blair in February 2004, with the specific aim of 'generating new ideas and action to promote a strong and prosperous Africa' and 'to help deliver implementation of existing international commitments'. In March 2005, The Commission for Africa published its final report entitled *Our Common Interest*. This report puts forward the case that the developed world has 'a moral duty—as well as a powerful motive of self interest—to assist Africa'. Much of the argument in the Commission's report echoes Sachs's conjecture that SSA is caught in a 'vicious circle of poverty' and requires a 'big push' to escape from this poverty trap.¹³

The end of poverty

The main thesis of Jeffrey Sachs's recent book *The End of Poverty*¹⁴ is that extreme poverty around the world can be ended by 2025, and the MDGs can be met by 2015 providing the long promised modest financial help from rich countries is forthcoming. According to Sachs, this extra assistance, if delivered in a well-formulated cost-effective package of investments, will enable the poorest countries to get their foot on the development ladder. Thereafter, 'the tremendous dynamism of self-sustaining economic growth can take hold'.

The G8 Summit

Under the Chairmanship of Tony Blair, the July 2005 G8 Summit in Gleneagles, Scotland,¹⁵ also focused on the plight of SSA. The G8 leaders agreed 'a comprehensive plan to support Africa's progress' and to support this plan with 'substantial extra resources which have strong national development plans and are committed to good governance, democracy

¹¹ See Sachs, 'Can Extreme Poverty Be Eliminated?', *Scientific American.com*, September, 2005. The estimate of \$160 billion per year does not include allowance for other humanitarian projects and according to Sachs, to meet these obligations, as well as the MDGs, would require assistance amounting to 0.7% of the combined GNP of the rich countries.

¹² http://www.commissionforafrica.org.

¹³ For a critique of these ideas, see Easterly, 2005.

¹⁴ http://www.earthinstitute.columbia.edu/endofpoverty

¹⁵ http://www.g8.gov.uk

and transparency'.¹⁶ More specifically, the G8 agreed to double aid to Africa and to eliminate outstanding debts of eligible highly indebted developing countries. According to the Gleneagles communiqué the G8 nations aim to increase assistance to developing countries by around \$50 billion a year by 2010 with at least \$25 billion of this package allocated to Africa, as well as writing off the debts of the world's poorest countries.¹⁷

The 2005 UN World Summit

The 2005 World Summit¹⁸ was the largest gathering of world leaders in history. Over September 14-16, more than 180 Heads of State met at the United Nations to forge an action plan for strengthening and reforming the United Nations, promoting international security and human rights, and for achieving the MDGs by 2015. The outcome of the Summit was an agreement by world leaders to support a large number of objectives relating to economic development, peace and collective security, human rights and the rule of law, and strengthening the UN. The development objectives include: reaffirmation of a commitment to achieving the MDGs by 2015; reaffirmation of the Monterrev Consensus; promotion of good governance, sound investment-friendly domestic economic policies, more open international trade, increased overseas aid, and debt relief; recognition of the 'special needs' of landlocked developing countries; and a number of 'quick impact' initiatives such as the distribution of anti-malaria bed nets. The '2005 World Summit Outcome' document also recognises the 'special needs of Africa', including the need to increase efforts to 'fully integrate African countries in the international trading system'.¹⁹

Foreign aid: A 'weapon of mass salvation'?

The important debate relating to the effectiveness of foreign aid in promoting growth and development has a long history and is riddled with problems relating to causality, measurement, and ideology.²⁰ Recently, the

education and the fight against HIV/AIDS, malaria, tuberculosis and other killer diseases.

¹⁸ http://www.un.org/summit2005

¹⁶ Source: See Tony Blair's summary of the G8 Summit at http://www.number10.gov.uk/output/Page7883.asp.
¹⁷ The G8 leaders also committed themselves to increasing support for African peacekeeping forces to help 'deter, prevent and resolve conflicts in Africa', and pledged additional resources to finance investment in

¹⁹ See '2005 World Summit Outcome' at http://www.un.org/summit2005

²⁰ See Friedman, 1958; Chenery and Strout, 1966; Pearson, 1969; Bauer, 1972; Brandt, 1980; Riddell, 1987; White, 1992; Cassen, 1994; Boone, 1996; World Bank, 1998; Alesina and Dollar, 2000; Alesina and Weder, 2001; Burnside and Dollar, 2000; Easterly, 2001, 2003a, 2003b, 2004, 2005; Brautigam and Knack, 2004; Hudson *et al.*, 2004; Easterly, Levine and Roodman, 2004; Quibria, 2005; Rajan and Subramanian, 2005a, 2005b.

aid controversy has been revived by Jeffrey Sachs's (2005a) argument that SSA is caught in a poverty trap and to escape needs a 'big push' via a substantial increase in Official Development Assistance (ODA). Sachs has also revived the campaign to persuade the rich countries to commit themselves to providing 0.7% of their GNP in official development assistance, a commitment reaffirmed at the 2005 UN World Summit.

At the annual World Bank–IMF meeting, 24 September 2005, World Bank President, Paul Wolfowitz, noted that 'we know that sustained economic growth is essential for development and reducing poverty'.²¹ While economists agree that a *necessary* condition for the elimination of extreme poverty is sustained economic growth, the idea that an increase in the flow of foreign aid to regions such as SSA will promote such growth remains controversial.²² There appears to be three broad views on the relationship between foreign aid and economic growth:²³

The optimists

Both the Pearson (1969) and Brandt (1980) Reports took an optimistic view of the potential for foreign aid to promote growth and development. The idea, based on the Harrod–Domar growth model, that most developing countries are growth constrained due to a 'financing gap' that could most effectively be filled by foreign aid, was conventional wisdom among the majority of development economists both within academia, and among those working in the key international institutions such as the World Bank and IMF.²⁴ This was especially the case during the 1950s and 1960s (see Chenery and Strout, 1966; Easterly, 2001; Easterly, Devarajan, and Pack, 2003).

The pessimists

Economists such as Milton Friedman (1958), and Peter Bauer (1972) argued that aid fails to increase economic growth, and may even reduce it, because of its adverse influence on the quality of governance and power of government bureaucracies, the encouragement of wasteful investment

²¹ Reported in the *Financial Times*, 26 September. The Board of Governors of the International Monetary Fund and the World Bank Group normally meet once a year to discuss the work of their respective institutions. For details of the 2005 meetings go to www.imf.org.

²² See Dollar and Kraay, 2002, 2004.

²³ See Radelet, Clemens and Bhavnani, 2005.

²⁴ See Snowdon and Vane, 2005, chapter 11 for a discussion of the Harrod–Domar growth model.

projects, corruption, the suppression of local entrepreneurial talent, the undermining of incentives, and the enrichment of entrenched elite groups who have little interest in economic progress. In the early 1970s economists such as Griffin, Enos and Weiskopf also argued that increased aid flows could reduce both public and private sector saving (see White, 1992; Boone, 1996). More recently, William Easterly has been an eloquent critic of both the theoretical underpinnings of the case for aid as well as the empirical support (Easterly, 2003a). However, Easterly does accept that aid *could* be useful in achieving more modest objectives than 'take-offs' into 'self sustaining growth' *if* incentives structures at ground level were improved and the existing bureaucratic flaws within the international aid agencies could be corrected (Easterly, 2003b, 2005).

The conditional optimists

Economists such as Jeffrey Sachs, Joseph Stiglitz, Nicholas Stern, Craig Burnside and David Dollar are 'conditional optimists'²⁵ who support an aid package directed at those countries that display at least a tolerable level of good governance and a commitment to internationally agreed development objectives. Sachs explicitly recognises that there is little the outside world can do to help a country governed by an elite that has no interest in progress (Sachs, 2005a). The influential study by Burnside and Dollar (2000) concludes that aid can stimulate growth in countries with good policies and institutions but is unlikely to do so in countries where those conditions are absent. More recent research by Radelet, Clemens and Bhavani (2005) distinguishes between three types of aid, namely, (i) aid for disaster and emergency relief, (ii) 'late-impact' aid for health and education projects, and (iii) 'early impact' aid for infrastructure projects. Obviously, there will be a negative statistical relationship between aid for disaster relief and growth, and aid for health and education projects is only likely to impact on growth in the long run. Only 'early impact' aid is likely to stimulate growth in the short term and therefore econometric studies that lump all aid flows together and then attempt to identify the impact of aid on growth are inevitably fundamentally flawed. Radelet, Clemens and Bhavnani conclude that 'while growth in SSA has been disappointing, it would have been worse in the absence of this kind (early impact) of aid'.

²⁵ That there are necessary prerequisites for aid to be effective has also been increasingly recognised by Live 8 optimists Bob Geldof and Bono.

Therefore the 'intense pessimism on aid effectiveness expressed by some analysts appears to be too strong'.

Creating a better investment climate

If the majority of SSA countries are to break out of their poverty trap, a strategy to raise productivity on a sustainable basis is required. At the heart of extreme poverty is the problem of low productivity. Moreover, the only meaningful definition of the 'competitiveness' of a nation is national productivity performance. The World Economic Forum's annual Global Competitiveness Report provides three complementary rankings of the competitiveness of nations that focus on productivity, namely, the Growth Competitiveness Index, The Business Competitiveness Index, and the Global Competitiveness Index.²⁶ Table 3 shows the competitiveness rankings for a selection of developed and developing countries from various parts of the globe as well as data on 'Ease of Doing Business', Corruption Perceptions, Political Freedom and Economic Freedom. Unsurprisingly, most SSA countries are ranked near the bottom in these indicators. For example, the full data set on economic freedom for SSA shows that out of 42 SSA countries, 30 are classified as 'mostly un-free' and 1 (Zimbabwe) as 'repressed'. Political rights and civil liberties, whilst improving in most of SSA, are also far from satisfactory.

To overcome many of the constraints on productivity in SSA will require a sustained program of targeted investments. Accordingly, the 2005 World Development Report, *A Better Investment Climate For Everyone*, highlights the need for governments to improve their country's 'investment climate' by improving the microeconomic environment in order to increase the opportunities and incentives for enterprises, both domestic and foreign, to invest productively. During the last decade there has been a growing recognition of the importance of improving microeconomic fundamentals, such as reducing transaction costs, risk, and barriers to competition, if a good investment climate is to be created that is conducive to sustainable growth and poverty reduction. However, as Sachs argues, the state has an important wider role to play, not only in improving the quality of governance, but also in focussing public investment in the key areas of health,

²⁶ The Growth Competitiveness Index was originally developed by John McArthur and Jeffrey Sachs (2001). See http://www.weforum.org/ for details.

	Growth	Business	Global	Ease of Doing	Corruption	Political	Economic
Country	Competitiveness Index ¹ 2004–05	Competitiveness Index ² 2004–05	Competitiveness Index ³ 2004–05	Business Index ⁴ 2005	Perceptions Index ⁵ 2004	Freedom Index ⁶ 2005	Freedom Index ⁷ 2005
Finland	1	2	2	13	9.7	LL	1.90
USA	2	1	1	ç	7.5	ц	1.85
Sweden	ç	4	5	14	9.2	ш	1.89
Taiwan	4	17	11	35	5.6	ш	2.29
Denmark	5	7	ç	8	9.5	Ŀ	1.76
Singapore	7	10	7	2	9.3	PF	1.60
Japan	6	8	10	10	6.9	Ŀ	2.46
UK	11	9	6	6	8.6	ш	1.75
Jermany	13	ç	9	19	8.2	ш	2.00
Chile	22	29	29	25	7.4	Ŀ	1.81
Spain	23	26	34	30	7.1	Ŀ	2.34
rance	27	12	17	44	7.1	Ŀ	2.63
(orea	29	24	26	27	4.5	Ŀ	2.64
Malaysia	31	23	23	21	5.0	PF	2.96
⁻ hailand	34	37	33	20	3.6	Ŀ	2.98
lungary	39	42	46	52	4.8	Ŀ	2.40
S. Africa	41	25	36	28	4.6	Ŀ	2.78
Botswana	45	62	58	40	0.9	Ŀ	2.44
China	46	47	32	91	3.4	NF	3.46
Italy	47	34	56	70	4.8	Ŀ	2.28
Mexico	48	55	60	73	3.6	Ŀ	2.89
India	55	30	37	116	2.8	ш	3.53
Brazil	57	38	49	119	3.9	Ŀ	3.25

Poland 60 57 72 54 3.5 F 2.54 Colombia 64 56 47 141 3.5 F 2.54 Colombia 64 52 66 47 141 3.2 F 2.34 Colombia 64 52 67 93 3.2 PF 3.34 Colombia 66 52 67 93 3.2 PF 3.34 Colombia 66 52 67 93 3.2 PF 3.34 Nucleia 69 44 75 77 2.5 PF 3.49 Argentina 74 74 75 77 2.5 F 3.36 Argentina 74 74 75 77 2.5 F 3.49 Argentina 74 74 75 77 2.5 F 3.49 Argentina 82 90 97 1140 2.8 PF 3.41 Uncaine 86 69 73 124 2.2 PF 3.41 Ursine 88 69 73 124 2.2 PF 3.41 Ursine 88 69 73 124 2.2 PF 3.41 Ursine 88 69 73 124 2.2 PF 3.73 Nigeria 91 73 124 2.2 PF 3.73 Nigeria 99 82 101 126 2.3 PF 3.73	Country	Growth Competitiveness Index ¹ 2004–05	Business Index ¹ Competitiveness Index ² 2004–05	Global Competitiveness Index ³ 2004–05	Ease of Doing Business Index ⁴ 2005	Corruption Perceptions Index ⁵ 2004	Political Freedom Index ⁶ 2005	Economic Freedom Index ⁷ 2005
62 66 47 141 32 NF 64 58 69 66 53 8 93 33 NF 66 52 67 93 33 32 NF 70 61 64 73 115 2.0 93 32 NF 70 61 64 73 115 2.0 93 32 NF 78 63 84 73 124 2.3 77 2.5 NF 86 63 73 124 2.3 77 2.5 NF 91 73 87 60 2.3 77 2.3 NF 101 93 81 77 94 1.6 2.3 NF 102 103 102 101 126 2.3 NF NF 103 103 102 101 1.6 2.3 NF NF 104 <td>Poland</td> <td>60</td> <td>57</td> <td>72</td> <td>54</td> <td>3.5</td> <td>L</td> <td>2.54</td>	Poland	60	57	72	54	3.5	L	2.54
64 58 69 66 3.8 PF 6 52 67 93 3.2 PF 70 61 64 73 3.2 PF 70 61 64 79 2.3 PF 70 61 64 79 2.3 PF 78 63 84 68 77 2.5 F 86 69 73 124 2.3 PF 91 73 124 2.3 PF 93 81 77 94 1.6 PF 93 101 99 102 101 2.3 PF 101 99 102 101 2.3 PF 104 102 101 2.3 PF PF 104 102 103 105 1.7 PF PF 104 102 103 103 1.7 NF PF <tr< td=""><td>Egypt</td><td>62</td><td>66</td><td>47</td><td>141</td><td>3.2</td><td>NF</td><td>3.38</td></tr<>	Egypt	62	66	47	141	3.2	NF	3.38
66 52 67 93 3.2 PF a 70 61 44 15 2.0 PF a 74 74 74 75 77 2.3 PF 7 63 84 64 79 2.8 NF 78 63 84 68 2.1 P P 86 69 73 124 2.3 NF 91 73 124 2.2 P P 93 81 77 94 1.6 2.3 NF 93 81 77 94 1.6 2.3 NF 93 81 77 94 1.6 2.3 NF 101 99 100 2.3 NF 1 1 103 102 101 126 2.3 NF 1 104 102 101 126 2.3 NF 1 <t< td=""><td>Colombia</td><td>64</td><td>58</td><td>69</td><td>66</td><td>3.8</td><td>PF</td><td>3.21</td></t<>	Colombia	64	58	69	66	3.8	PF	3.21
a 69 44 48 115 20 PF a 74 75 77 226 PF 88 63 84 68 21 PF 88 69 97 140 228 PF 91 77 225 F 81 124 22 PF 93 81 77 94 140 228 PF 93 81 77 94 116 PF 94 126 221 NF 101 99 102 101 223 NF 102 95 94 65 115 PF 103 103 103 102 101 223 NF 104 102 103 103 150 17 NF	Turkey	66	52	67	93	3.2	PF	3.46
70 61 64 79 2.8 NF 74 74 75 77 2.8 NF 78 63 84 75 77 2.5 7 82 90 97 140 2.8 PF 86 69 73 124 2.2 PF 91 73 87 60 2.1 NF 93 81 77 94 1.6 PF 93 82 101 126 2.3 NF 101 99 102 101 2.3 NF 103 103 102 94 65 1.5 PF 104 102 103 103 152 1.7 NF	Indonesia	69	44	48	115	2.0	PF	3.54
 74 74 74 75 77 25 77 25 77 25 71 25 73 124 23 73 124 23 73 124 23 77 140 28 73 124 22 74 73 124 22 74 73 124 22 77 94 116 77 94 116 77 94 116 71 94 116 73 87 60 2.1 116 116 117 117 117 117 116 	Russia	70	61	64	79	2.8	NF	3.56
78 63 84 68 2.1 PF 82 90 97 140 2.8 PF 86 69 73 124 2.8 PF 91 73 124 2.2 PF 93 81 77 94 1.6 PF 93 82 101 126 2.3 NF 101 99 102 94 1.6 PF 101 99 102 102 2.3 NF 103 102 95 94 1.5 PF 103 102 102 101 2.3 NF 104 102 103 152 1.7 NF	Argentina	74	74	75	17	2.5	Ŀ	3.49
82 90 97 140 2.8 PF 86 69 73 124 2.2 PF 91 73 87 60 2.1 NF 93 81 77 94 1.6 PF 93 82 101 126 2.3 NF 101 99 102 94 1.6 PF 101 99 102 102 2.3 NF 103 102 95 94 1.5 PF 103 102 102 103 104 1.5 PF 104 102 103 104 135 2.0 NF	(enya	78	63	84	68	2.1	PF	3.28
86 69 73 124 2.2 PF 91 73 87 60 2.1 NF 93 81 77 94 1.6 PF 93 82 101 126 2.3 NF 101 99 102 94 1.6 PF 101 99 102 102 2.3 NF 101 99 102 101 2.3 NF 103 103 102 94 1.5 PF 103 103 102 101 2.3 NF 104 102 103 104 135 2.0 NF	lanzania	82	06	97	140	2.8	PF	3.41
91 73 87 60 2.1 NF 93 81 77 94 1.6 PF 93 81 77 94 1.6 PF 101 99 82 101 126 2.3 NF 101 99 102 102 101 2.3 NF 101 99 102 101 2.3 NF 103 103 102 94 65 1.5 PF 103 103 103 104 135 2.0 NF 104 102 103 152 1.7 NF	Jkraine	86	69	73	124	2.2	PF	3.21
93 81 77 94 1.6 PF e 99 82 101 126 2.3 NF sh 101 99 102 101 2.3 NF sh 101 99 102 101 2.3 NF 101 99 102 101 2.3 NF 103 103 104 135 2.0 NF 104 102 103 152 1.7 NF	akistan	91	73	87	60	2.1	NF	3.73
e 99 82 101 126 2.3 NF 101 99 102 101 2.3 PF sh 102 95 94 65 1.5 PF 103 103 103 104 135 2.0 NF 104 102 103 103 103 NF NF	Vigeria	93	81	17	94	1.6	PF	3.95
101 99 102 101 2.3 PF ssh 102 95 94 65 1.5 PF 103 103 103 104 135 2.0 NF 104 102 103 103 103 NF	Zimbabwe	66	82	101	126	2.3	NF	4.36
desh 102 95 94 65 1.5 PF 103 103 104 135 2.0 NF 104 102 103 152 1.7 NF	thiopia	101	66	102	101	2.3	PF	3.73
103 103 104 135 2.0 NF 104 102 103 152 1.7 NF	angladest	_	95	94	65	1.5	PF	3.95
104 102 103 152 1.7 NF	ngola	103	103	104	135	2.0	NF	4.48^{8}
	Chad	104	102	103	152	1.7	NF	3.38
	. World Bank . Transparenc . Freedom Hou . Old. F =Free, . The Heritage Mostly Free, 3-	 World Bank Vata: Full sample or countries = 155. Transparency International, www.globalcorruptionreport.org. Highest Possible Score = 10, Lowest Possible Score = 0. Full sample of countries = 146. Freekord Musse, http://www.freedomhouse.org. Freedom is measured according to two broad categories—political rights and civil liberties—and reflects data gathered for the period December 1, 2003-November 30, 2004. F = Free, PF = Partly Free, NF = Not Free. According to Freedom House, the world's least free countries in 2005 are Burma, Cuba, Libya, North Korea, Saudi Arabia, Sudan, Syria and Turkmenistan. The Herizage Foundation, http://www.herizage.org. The Herizage Foundation/Wall Street Journal <i>Index of Economic Freedom</i> measures freedom utilising 50 independent variables and scores of 1–2 = Free, 2–3 = Mostly Untree, 4–5 = Repressed. 	, meport.org. Highest Possible Score eedom is measured according to tv ording to Freedom House, the worl g. The Heritage Foundation/Wall St	= 10, Lowest Possible Score = 0, wo broad categories—political right did's least free countries in 2005 ar reet Journal Index of Economic Free reet Journal Index	. Full sample of countrie hts and civil liberties—a e Burma, Cuba, Libya, N <i>eedom</i> measures freedom	s = 146. Ind reflects data gathered for orth Korea, Saudi Arabia, Su utilising 50 independent va	the period December 1, dan, Syria and Turkmeni riables and scores of 1-	, 2003–November 30, istan. –2 =Free, 2–3 =

education, and basic infrastructure—'Targeted investments backed by donor aid lie at the heart of breaking the poverty trap' (Sachs, 2005a). While Sachs rejects inward looking development strategies based on heavy state involvement, he also emphasises that a major lesson from twentieth century economic history is that a state's activities should match its capabilities. Following the Ricardian principle of comparative advantage, an effective state will be one that focusses on getting the fundamentals right. Because the activities of the state and the market are complementary—since markets cannot function without the necessary institutional foundations—neither *laissez-faire* nor *dirigisme* are appropriate frameworks for a successful development strategy (Sachs, 1999; World Bank, 1997, 2002; Snowdon, 2001; Stern, Dethier and Rogers, 2005).

Economists rediscover geography

While Table 3 suggests that the current political and economic climate in much of SSA is not conducive to sustained economic growth and poverty reduction, Sachs (2005a) argues that 'the focus on corruption and governance is exaggerated' and 'Africa's governance is poor because Africa is poor'. Furthermore, according to Sachs, compared with other poor countries with similar quality of governance, growth in SSA is lower, implying that there must be other important barriers to progress that have been neglected by economists. The chief suspect is 'extraordinarily disadvantageous geography' (Bloom and Sachs, 1998).

While conventional neoclassical growth theory provides a useful framework for analyzing the determinants of output per worker, Sachs has made a major contribution to economists' understanding of the deeper determinants of growth by reminding them of the constraints often imposed by geographical influences, particularly in the case of SSA. Geography is clearly a major determinant of agricultural productivity, transport costs, health, and the location of exploitable natural resources. Since specialization and the division of labour depend on the extent of the market, then transport costs, as well as economic policy, must play a key role in the determination of productivity (Gallup, Sachs and Mellinger, 1999). In reminding economists of the importance of geography, Sachs is following on in the tradition of Adam Smith (1776) who 'gave deep attention to the geographical correlates of growth' as well as the importance of institutions (Ying, 2003).

INTERVIEW

In the interview that follows,²⁷ as well as discussing problems relating to SSA, I also discuss with Professor Sachs his earlier work relating to monetary economics, Latin America, and the economics of transition. As will become evident, to understand Professor Sach's current perspective on the problems facing SSA and his preferred policy solutions to these problems, it is necessary to trace the development of his thinking as it evolved from his research and work as a consultant, in particular during the period 1985–95. This is crucially important with respect to the evolution of Professor Sachs's thinking on trade liberalisation, debt relief, the key role of foreign assistance, and the important constraint that unfavourable geography imposes on the policy choices and development prospects facing many poor countries.

Background information

How and why did you become an economist?

I started out in this line of activity thirty-three years ago as a freshman at Harvard College and quickly fell in love with economics. I think this was because I came to economics, not so much out of an interest in the tools and techniques, although these are important and intriguing, but because of the big important issues with which economics is concerned. As soon as I started travelling and seeing other parts of the world, seeing the various ways that societies are organised, even at a young age I started to ask myself big questions. What works? Why is there a communist world and a capitalist world? What helps societies achieve internal peace and cohesion, and material well-being? Why are some developing countries failing to achieve satisfactory progress? What makes for good public policy? These are the sorts of questions that got me engaged with economics very early on. I am still looking for answers to many of these types of questions today and this makes economics endlessly captivating.

²⁷ I interviewed Professor Sachs in his office at the Earth Institute, Columbia University, New York, on May 2, 2005.

Were there any particular economists, events or ideas that influenced you during this early period?

Yes, one particular experience did have a big effect on my thinking. I decided to visit a pen-pal in East Berlin at the end of High School. My exposure for a week to socialist society was a big eye-opener. I was absolutely befuddled by the experience (laughter). It also made me realise just how little I actually knew about my own country. During that whole week I was besieged with questions from young East Germans. Why do you have unemployment in the US when we do not? Why do you have poor people and inequality in the US? I could not challenge or give satisfactory answers to these questions about my own country! I did not even know what the facts were or what the appropriate framework was to think about those kinds of questions. At the end of that trip I was taken to a tourist store to spend my East German marks and I spotted some books. One was Historical and Dialectical Materialism by Karl Marx which I bought, took home with me, and tried to make sense of. By the time I got back to the US, and was preparing to go off to Harvard, I had been assigned as freshman reading Joseph Schumpeter's (1943) classic work, Capitalism, Socialism and Democracy. I remember being mesmerised by the ideas in that book, and also not understanding much of it. But at the same time I could see that these were issues that I really wanted to understand. By the time I began my studies at Harvard, I was already overflowing with questions about economics. I continue to be fascinated by economics and regard being an economist a remarkably challenging and satisfying profession.

Early work

It is very evident from reading your book, The End of Poverty (2005a), as well as some of your early papers, that you have a great interest in history, in particular economic history.²⁸ In your 1999 paper, 'Twentieth-Century Political Economy: A Brief History of Global Capitalism', you argue that for the first twenty-five years or so after World War II, it is evident that the wrong lessons had been learned about the Great Depression. In particular, you say that Keynes was mistaken to argue that

²⁸ See, for example, Eichengreen and Sachs, 1985.

such massive instability is inherent to the capitalist system. As a consequence, you say that Keynes's General Theory of Employment, Interest and Money (1936) helped to propagate the view that the 'Great Depression was a general situation of market economies rather than a one time fluke of grotesque proportions'. In what ways did Keynes's disillusioned vision of laissez-faire capitalism influence post-war ideas, in particular those relating to economic development?

My education at Harvard left me with a tremendous admiration for Keynes and I still regard him as the greatest political economist of the twentieth century, and perhaps the greatest clinical economist of all time, in terms of his ability to read most situations. Like Keynes, I believe that governments have an important role to play in market economies. However, I think one of the most interesting observations about John Mavnard Kevnes was made by Friedrich von Havek, whose ideas, unlike those of Kevnes, I do not tend to follow. Havek said that one of Kevnes's really important mistakes was to call his masterwork the 'General Theory...' rather than 'A Tract for Our Times'. That is quite an important and astute observation, because the Great Depression was, sui generis, the largest disruption that industrial societies have experienced since the start of the Industrial Revolution. Thank goodness it has never been repeated. Therefore it was probably not fitting for there to be a 'General' theory about such a unique event that resulted from a confluence of extraordinary events that led to a severe crisis of capitalism during the 1930s. Although Keynes did more than anybody else to analyse this event, several important lessons were not learned and unfortunately had an adverse influence on policy choices made in many developing countries. For example, in his 1933 lecture, 'National Self Sufficiency', Keynes clearly had lost faith in free trade.²⁹ It reflected a loss of nerve that is completely understandable given the circumstances of that period. However, unfortunately the loss of faith in free trade continued after World War II and experimentation with protectionism and import substitution-led industrialisation strategies became widespread, especially among developing countries, with very debilitating effects. Even darker lessons were mislearned with respect to the relative merits of socialism versus capitalist market organisation. The example of the Great Depression was used not only to make the sensible

²⁹ See Eichengreen, 1984.

case for stabilisation policy; it was also used—though not by Keynes himself—to support arguments in favour of state ownership on a massive scale. So this calamitous event, which was the result of a confluence of historical processes after World War I, especially the inability of the Gold Standard to support the international economic system, was taken much more generally as an indictment of trade, markets and capitalism.³⁰ This inevitably led to a tremendous amount of mischief and misunderstanding that took a long time to rectify.

During the 1970s, the problem of stagflation dominated economists' attention, and the poor macroeconomic performance of many of the leading economies during the 1970s and early 1980s contributed to a growing disillusionment with interventionist policies in general. It was towards the end of this period of instability that your co-authored book with Michael Bruno (1985), the Economics of Worldwide Stagflation, was published.³¹ Looking back, what perspective do you now have on the macroeconomic instability of the 1970s?

Three things happened in the early to mid-1970s that are still not easy to disentangle. First, there was the collapse of the Bretton Woods exchange rate system, which represented a huge monetary shock because the dollar could no longer serve as the stable anchor for the international monetary system given the high inflation in the US. As the Bretton Woods system collapsed, there was a huge explosion of monetary growth and high inflation in many of the industrial economies. Second, there was a sharp decline of productivity growth that lasted for twenty years. The productivity slowdown was not understood then and it is still not fully understood now. Third, there were the OPEC oil price shocks of 1973-74 and 1979 and what that meant for the world economy. My research during those vears was focussed on trying to understand something about the balance of impact of those three forces. The book with Michael Bruno put a great deal of attention on the supply shocks. In a sense, our treatment was not Keynesian because we put emphasis on shifts of the aggregate supply curve rather than shifts of the aggregate demand curve. I think in that book we made some headway in understanding the impact of supply shocks. Neither we, nor anybody else, understood the significant change

³⁰ See Snowdon, 2002a, chapter 4.

³¹ See also Sachs and Larrain, 1992.

in productivity trends that turned out to be reasonably long term. For me, another important feature of that whole period was the growing emphasis among economists of the influence of comparative institutions. My 1980 PhD dissertation at Harvard focussed on how labour markets in Europe and the US had reacted differently to those supply shocks. I became fascinated by differences in institutions as a basis for explaining differential economic performance. This, in turn, raised my awareness of the historical, political and social roots of different institutions. So this period for me was one where I was trying to broaden the range of issues that macroeconomics deals with, including paying more attention to the impact of supply shocks and the role of institutional design.

At that point, did you anticipate that you would broaden your analytical approach even further to take into account the impact on economic performance of such factors as geography, climate and disease?

For me this period was the very beginning of my appreciation of how location influences economic outcomes and why a single model can never be satisfactory for comparing the performance of different economies. It began with my research on labour markets, but in more recent years I have focussed increasingly on physical geography and ecology. In my own mind I can see the relation of my current work with that in the early 1980s. In trying to account for comparative economic performance, the connecting thread in my research is the emphasis given to the structural characteristics of economies.

Bolivia 1985

In 1984–85, Bolivia experienced a serious hyperinflation. You were invited to Bolivia to offer advice on how to bring to an end this hyperinflation and duly arrived in La Paz in July 1985.³² In offering advice to the Bolivian government, and in drawing up a draft plan of action, how and to what extent were you influenced by the Keynesian, monetarist and new classical contributions to the macroeconomics literature?

³² See Sachs, 1987, and 2005a, chapter 5.

When I think back, it is amazing how I compartmentalised this challenge. Of course, I knew Bolivia was poor, but I did not at that time think of myself as a development economist or one concerned with long run growth issues. Rather, I saw myself as a macroeconomist who was technically equipped to offer advice on situations of extreme monetary instability, in this case a hyperinflation which over two years had reached about 24,000 per cent. For such episodes, monetary theory must be at the centre of any coherent analysis. So my main reference points related to the monetarist work of Milton Friedman and Philip Cagan. Also crucial was the wonderful essay by Thomas Sargent, The Ends of Four Big Hyperinflations, which I took with me to La Paz.³³ Sargent, who is usually thought of as a rational expectations new classical macroeconomist, showed how hyperinflations can be stopped very quickly. But the work of Keynes, in his Economic Consequences of the Peace and Tract on Monetary Reform, also greatly influenced my thinking.³⁴ In 1919, Keynes had emphasised how the debt burden imposed on Germany at Versailles could undermine the chances, not only of Germany's economic recovery, but also the recovery of Europe as a whole.

What were the essential elements in your recommended strategy?

Initially my focus was on the short-term question, How do you end this hyperinflation? Since the proximate cause of any hyperinflation is excessive monetary growth, that obviously had to be the starting point in my approach to drawing up a strategy. Excessive monetary growth usually has its origins in persistent government fiscal deficits. In Bolivia's case we agreed on a package of fiscal measures combined with an increase in the price of oil that was specifically aimed at increasing the flow of government revenue. The programme was initiated at the end of August 1985 and within a week the hyperinflation was over. In 1985 the Bolivian government was bankrupt and unable to service its foreign debts. I also helped to organise a strategy of debt cancellation. There is one other important point that I want to make that relates to my Bolivian experience. The more I get involved with practical matters, the greater is my disenchantment with academic economics for not having a real feel for what

³³ See Cagan, 1956; Friedman, 1956; Sargent, 1982.

³⁴ Keynes, 1919, 1923.

the crucial issues are. Many economists have a tendency to get into debates which are not, in my experience, about the relevant issues. For example. I remember my frustration relating to the Bolivian situation when, following the successful stabilisation programme, some three years later, several economists began attributing slow economic growth in Bolivia to the chosen exchange rate policy. This was so unrealistic. Did those economists critical of the strategy have any knowledge of the geographical constraints facing Bolivia? Here is a landlocked country, half of which is 12,000 feet up in the Andes and half is in tropical lowlands, facing very high transportation costs. While altitude does not affect monetary theory and the analysis of hyperinflation, it certainly impacts on the potential for economic development and growth. While Adam Smith in his Wealth of Nations (1776) was well aware of the constraints imposed by geography on a country's ability to integrate with the rest of the world, modern economists were quick to offer advice that largely ignored these geographical realities. So after that experience I began to seriously question the quality of academic analysis (laughter).

The economics of transition: Poland, Russia, and China

In the late 1980s and early 1990s, you became heavily involved with problems of transition, acting as an economic advisor in both Poland and Russia during this period.³⁵ Did your work in Bolivia prepare you in any way for this enormously difficult task?

Yes, my work in Bolivia had forced me to think about longer term issues in ways that I had not anticipated. I began to think about the underlying causes of poverty and economic development, and about the implications of Bolivia's geography, given its position as a landlocked mountainous country. I also started to think about the role of globalisation in economic development, because it was impossible to think about Bolivia's longerterm prospects without taking into consideration its links with the outside world. During the 1980s, the liberalisation of trade—which I fully support—was becoming a big issue. Although I had not gone to Bolivia to look at longer term development issues, by acting as an advisor to the head of

³⁵ See Sachs, 2005a, chapters 6 and 7; Sachs, 1993, 1996a; Sachs and Lipton, 1992; Sachs, Woo and Parker, 1997; Sachs, Lipton, Fischer and Kornai, 1990.

Bolivia's economic team, who was interested in broad-based liberalisation, it was inevitable that I would get engaged with very practical questions to do with globalisation, although we were not using that terminology back then. So by the time I was invited to Poland, in April 1989, I started to have a real sense that the essential issue for Poland was how it was going to relate to the rest of the world. In Bolivia you could not ignore the geographical realities that it was a landlocked mountainous economy that had historically been a relatively closed society. In Poland it was a case of reconnecting the Polish economy with the rest of Europe. I immediately likened the situation in Poland in 1989 to that of Spain circa 1955 in terms of land mass, size of population, distance from the centre of the European Union, GDP per capita, and its predominantly Catholic religion. In 1989, Poland was also returning to Europe after being in the Soviet sphere for 40 vears, while Spain in 1976 was returning to Europe after 40 years of fascist dictatorship under Franco. But while Spain after 1976 had been quickly reintegrated into the mainstream of European cultural, political and economic life, Poland had been artificially kept apart. So I began to see that the Polish revolution was about reconnecting with Europe just as post-Franco Spain had reconnected with Europe after 1976. My advice was therefore tailored to this reality.

To what extent has the focus on 'Gradualism vs. Shock Therapy' offered an accurate summary of the two broad paths available to the former communist economies in their objective of creating a viable capitalist market economy?

When I got involved with policy advice in Poland, all of a sudden every discussion began to be framed in terms of the shock therapy vs. gradualism dichotomy. This really surprised me because this is almost entirely an academic debate, and I have to say that I use those words in the pejorative sense *(laughter)*. The distinction drawn between big bang and gradualism is a gross oversimplification of the whole question of the pace and sequencing of reform. Clearly, some of the measures that I was recommending needed to be done quickly. The real 'shock therapy' was the idea that you could quickly move to currency convertibility rather than over a ten-year period as happened in post-World War II Western Europe with the European Payments Union. I advised a quick move to currency convertibility because it was necessary to re-engage Poland to the

international trading system. The Zloty was devalued and unified with the black market rate and then pegged to the dollar and the new peg was successfully defended by a one billion dollar Zloty stabilisation fund.³⁶ Other important matters, such as privatisation, were obviously going to take a long time. I remember the first document that I prepared on this suggested that privatisation would be a 5-10 year, rather than overnight, process. Other changes, such as Poland's whole mode of thinking and organisation, moving from a communist structure to a market economy structure, were going to take much longer-twenty or more years. So I agree that there were debates on these matters, but I have always regarded labels such as 'big bang', 'shock therapy' and 'gradualism' as totally misleading. Indeed, the labels struck me as odd. The one real innovation about speed that I introduced was the idea of quick currency convertibility. That move was a great success and played a crucial role in helping Poland engage in trade, fill up the empty shelves in the shops, and stimulate private sector led economic growth. I believe that none of us knew much about how best to plan for privatisation on a massive scale. Actual Polish experience proved to be better than any theory, by far.

Do you think that from a historical perspective Poland's reforms will be viewed as highly successful?

In 1989, Poland was not only in chaos but felt to be in chaos by the Poles themselves. Most visibly, the shops were empty. There were profound concerns about whether the country could even hold together, whether there would be civil war, even whether there would be starvation. Solidarity, the leading political authority in the country, was very reluctant to take power early on. That's how much fear there was, and many commentators thought that the whole situation was uncontrollable. Actual results vindicate the strategy adopted, with some important innovations and political economy successes. For example, my recommendations in negotiating a big cancellation of Poland's debt, as well as the idea of establishing the one billion dollar Zloty stabilisation fund, were a success. The privatisation process turned out to be unlike anything any of us expected, with some hits and some misses, but was much better than the disastrous

³⁶ Sachs, 1996b.

privatisation strategy in Russia.³⁷ So I think the Polish transition has on the whole been very successful. Basically, Poland got reconnected to Western Europe. On the other hand, those Poles aged over 45 in 1990, who had been trained for life in a socialist economy, never found a happy or comfortable footing in the new market economy. This is one of the most unfortunate legacies of a half-century of disastrous economic management under a communist system.

Some critics argued that institutional reform was neglected in the reform strategies recommended to transition economies. How do you react to this line of criticism?

I sometimes find it very frustrating to listen to academics talking about these issues. I am constantly asked, 'Don't you know that countries need institutions and the rule of law?' To me this is obvious and apparent to anyone with their eyes open. I was, and I am, well aware of the importance of institutions and the rule of law. It's all in Adam Smith! But an economic advisor has to be concerned with practical steps about how to proceed in real historical circumstances.³⁸

The Russian privatisation has deservedly received a bad press. What went wrong?

First let me emphasise and repeat what I believed *should* have happened, before I discuss what *actually* happened. Those are two very different things. I favoured a very quick privatisation in Russia of the non-resource sector of the economy. So this privatisation strategy would specifically *exclude* the oil, gas, diamonds, nickel and other raw material sectors. These sectors were all vital contributors of tax revenue to the public finances of Russia. Indeed, they were the main flow of income for the state, and these revenues financed the pension and healthcare systems. On the technical side, I did not think that these sectors were an important priority for privatisation, because I believed that these vast enterprises could be successfully managed within a state ownership framework as they are in many other parts of the world. So what I recommended for privatisation were the smaller enterprises such as the garment factories, the umbrella factories, the clock factories, the raincoat factories and so forth. These smaller

³⁷ See Sachs, Lipton and Summers, 1990.

³⁸ Fischer, 1993. See also Stanley Fischer's remarks on this issue in Snowdon, 2004a.

enterprises should be privatised through schemes such as vouchers or worker management buyouts. I thought it was very important to get some private ownership fairly early on. The outcome of that part of the privatisation process was disappointing and did not work out very well. Some of the things that I recommended were done but overall I was not too impressed with the results. But the privatisation of the energy and raw material sectors was an utter disaster. There was a massive political and corrupt grab of the real sources of cash flow and wealth in the economy. The oil, gas and diamonds sectors should never have been in the frame for privatisation and I was staunchly against this from the beginning. The voucher and management buyout ideas were certainly not appropriate for these high value sectors. I knew from my experience in Bolivia and many other countries that these sectors were the core of Russia's public finance. In 1995, some 18 months after I had left as an advisor, the government implemented the disastrous privatisation strategy that in reality amounted to the organised theft, by a group of oligarchs, of the energy and mineral sectors. This strategy consisted of a set of policies that were obviously corrupt at the time. An amoral elite acting in a country that lacked any organised opposition or civil society seized this easy opportunity to steal valuable natural resources, and there was a lot to steal! Although I was no longer directly involved day to day with Russia, I obviously still knew a lot of what was going on and I recall making vociferous complaints to the IMF, the World Bank and the US Treasury about the corrupt grab of valuable assets that was happening in Russia. Basically, the US government and other Western powers were not interested because they thought that this action would somehow help strengthen the position of Boris Yeltsin. To me, it looked more like the putting into practice of Proudhon's famous dictum, 'Property is theft'. In Russia the oligarchs had taken this literally.

What do you say to those who took the view that it did not really matter who gets the assets so long as they end up privately owned and in the long run things will work themselves out?

I regard that position as sheer nonsense and could only appeal to people who do not appreciate the fact that societies are held together by ethical standards, by legitimacy, by a sense of fairness and basic political standards. The bottom line is this. The situation in Russia was very complex. It was not simply four times Poland in terms of scale. It was much more complicated because of the sharp internal divisions and lack of international support. The voucher privatisation that I supported early on was a muddled affair, but not disastrous because not too much of a problem can result for the Russian economy if the privatisation of a raincoat factory does not go to plan. And it is hard to know what realistic alternatives there were at that time. When you are sitting there and there are some 30,000 enterprises without any management guidance available because the Soviet Union no longer exists, it is very difficult to know the best way forward. The key point is that there is no excuse for what happened in 1995. You do not give away billions of dollars worth of oil and gas assets to a small group of oligarchs and expect a good outcome. Russia is still having to grapple with the consequences of that strategy. For example, who does one side with in the recent tension between President Putin and the oligarchs? It's an awful choice.

As an advisor you must have been very frustrated by what you were witnessing in Russia during this period.

Absolutely. For a lot of reasons that I discuss in *The End of Poverty*, almost nothing that I said was actually applied in the first two years because the domestic political situation in Russia was horrendously more complex than Poland. Also, the Western international community, particularly the US, was considerably more hostile towards Russia on geopolitical grounds that I did not agree with. My hope that a 'Grand Bargain' would be struck between Russia and the US, that the US would provide financial help to cushion the hardships that would result in the short term provided Russia accelerated its reforms, never materialised in the amount needed. The US was simply not interested in helping Russia in the same way that it had helped Poland. My previous experience as an advisor in Bolivia and Poland had taught me that when a country is in a desperate economic crisis, both dramatic internal reforms and outside aid is needed to have any chance of success. Keynes had seen this clearly in the case of Germany after the punitive Versailles Treaty in 1919. Unfortunately, the US government was blind to this reality after the collapse of the Soviet Union in December 1991. This was very frustrating given the high risks involved with such a strategy.

What important lessons as an advisor did this whole Russian episode teach you?

I have learned one very important lesson from this whole episode. The lesson is that no matter what one actually says and recommends, it will be the outcomes that are attributed to you. Whether your actual advice was followed, or completely ignored and followed in its antithesis, does not seem to matter. So when these enterprises were stolen by the oligarchs, many people said to me, 'How could you let that happen?'. In reality, the privatisation strategy was the polar opposite of what I had actually advised. So there is still much confusion on this matter. So let me take this opportunity to get it on the record that I have made a lot of recommendations in recent years for controlling malaria. If these recommendations are not taken up I do not want to end up being blamed for malaria in Africa!³⁹

At what point did you decide to end your role as an economic advisor to Russia?

I acted as an economic advisor to Russia for two years, 1992-93, and resigned at the end of 1993. In fact, in 1993 I only staved on at the request of the Finance Minister because I could already tell from my experience in 1992 that the complex political economy problems of the Russian situation were way beyond those I had been dealing with in Poland. The sheer scale of the problems, the thousand-year political legacy of autocratic rule, the seventy-five year legacy of rigid central planning, the lack of any civil society, and the geographical, cultural and linguistic diversity of Russia, all meant that there were going to be no easy options in the transition process. Virtually everything in Russia needed an overhaul. But, at the same time, I also firmly believe that in life you should try to do your best even when you know that the odds of success are sometimes not great. The idea is to help if you can and that's what I was doing in Russia in 1992–93. When I left at the end of 1993, the young talented reformers led by Yegor Gaidar had been thrown out and Victor Chernomyrdyn, a dull Soviet-era apparatchik, whom I did not trust for very good reasons, had become Gaidar's successor.

³⁹ Sachs, 2002a.

In a recent paper, Andrei Shleifer and Daniel Treisman (2005) argue that the commonly held view that Russia is a disastrous and threatening failure as a transition economy is incorrect. The reality, they argue, is that Russia has successfully been transformed from a communist dictatorship to a multi-party democracy, and from a centrally planned economy to a capitalist market based economy, in a relatively short period of time. Therefore, they conclude that Russia is now a typical middleincome capitalist economy, and many of its characteristics, including corruption levels, are normal for its stage of development. Do you agree with this assessment?

No, I do not. I witnessed first hand the good orderly reform strategy in Poland. Even though there was chaos at first, Poland eventually experienced continuing rising living standards, including improving health conditions, without the system falling apart and the legitimacy of the political order being brought into disrepute. That is what I consider to be a successful reform strategy. In my view, Russia did not have a successful decade of reform. Life expectancy fell sharply, anxiety and stress levels were extremely high, and corruption was massive. I suppose one can take the Olympian view that history sorts all of these things out, that Russia is now growing and is a market economy. But I think that the standards of economics should be a lot higher than that. As an advisor you are there to help reduce the transition costs. If you simply take the view that everything will be alright in the long run, then you are not saying very much. By now I have seen a lot of successful reform and I have also observed unsuccessful cases, as in Russia and Yugoslavia. In the case of Yugoslavia we saw a massive social, political and economic failure induced by the most irresponsible vitriolic demagogy and appeal to violence that I have seen close up. These cases are failures. Russia may in the end, as Boris Yeltsin always hoped, become a normal democratic market economy. But that in no way absolves responsibility for what happened during the 1990s, which to my mind was not economics at its finest. I do not hold myself accountable because the chosen strategy was not what I advised, and I would not present the Russian example as a case of successful reform. Having said all that, the worst did not happen. Many thought there would be civil war. There has been much violence, for example in Chechnya, but there have also been successes. But I cannot help thinking that Russian society could have been happier, healthier and more prosperous today if a sounder economic strategy had been applied and supported internationally.

The responsibilities for why that did not happen are extremely complex. So although I am cautiously optimistic about the future, I would not call Russia a successful example of transition, based on what actually happened during the 1990s.

A popular misconception among many transition commentators is that China after 1978 chose a superior gradualist path of reform compared to Russia, the implication being that Russia should have learned from this and imitated China's successful strategy. But surely such comparisons are extremely naïve given the huge structural differences that existed between these two countries at the start of their reform process. So in reality, the Chinese transition strategy was never going to be a viable option for Russia.

That's right, but what is also not widely appreciated is the fact that Gorbachev had already tried gradualism between 1985 and 1990. It failed! Hungary's attempt at gradual reforms, the so-called 'goulash socialism', also failed even earlier.⁴⁰ Anyone who wants to assess the options available to China and Russia in 1978 and 1991 respectively must take the following facts into account.⁴¹ In 1978, China was still a predominantly agricultural economy, with about 80 per cent of the population living in rural areas. Therefore, the structure of the Chinese economy in 1978 was more like the structure of the Russian economy before 1914. In China only 20 per cent of the population worked in state owned enterprises in urban areas. Conversely, in Russia virtually all of the working population were employed in state owned enterprises. China implemented a 'big bang' liberalisation of the large communally owned agricultural sector in the late 1970s. This really was shock therapy! This significantly boosted agricultural output and also allowed many workers to migrate to the special economic zones along the coast that were to become the engine of labour intensive export led growth. Taking advantage of its 'backwardness', China followed a path of normal economic development as surplus labour transferred from the low productivity rural sector to the high productivity emerging industrial sector.⁴² So China used a 'two-track' strategy of shock

⁴⁰ See János Kornai's discussion of failed reform in Hungary in Snowdon, 2003a.

⁴¹ See Sachs and Woo, 1994.

⁴² This type of process was formalised in Arthur Lewis's (1954) seminal paper, 'Economic Development with Unlimited Supplies of Labour'.

therapy in agriculture and gradual reform in the relatively small stateowned enterprises sector. In Russia there was no large non-state sector to be liberalised. Soviet-style agriculture was large scale and capital intensive. Unlike China, Russia had an enormous, heavily subsidised, state owned industrial sector in need of liberalisation. So in almost every respect the reform strategy in Russia was going to be much more complicated and conflictual. The unavoidable problem for Russia was how to implement massive structural adjustment rather than initiate normal economic development. I have also argued that China's experimental institutions, such as the 'Household Responsibility System', 'Land Leasehold', 'Township and Village Enterprises', 'Special Economic Zones' and 'Liberalised State Owned Enterprises', represent a half-way-house in terms of institutional development resulting from ideological differences within the Chinese political leadership. I expect those institutions to evolve and change so that they eventually converge towards those in other successful East Asian capitalist market economies.⁴³ So the Chinese strategy was never a viable option for the former communist economies of Eastern Europe and the Soviet Union. Remember also, unlike Russia, the Chinese have vet to accomplish the perhaps more difficult task of political liberalisation.

The influence of geography and institutions

You have been involved in a long debate in the literature concerned with the deeper, more fundamental determinants of economic growth and development.⁴⁴ This debate has focussed on the relative importance of geography vs. institutions. As you have already stressed earlier, economists have for too long neglected the influence on growth and development of geographical factors such as climate, location, and topography. But there are cases where institutional differences clearly dominate, such as North and South Korea, and East and West Germany, where very different living standards are observed alongside very similar geographical features. How do these cases fit into your argument?

⁴³ See Sachs and Woo, 1997.

⁴⁴ See Sachs, 2000a, 2003a; Bloom and Sachs, 1998; Sachs and McArthur, 2001; Gallup, Sachs and Mellinger, 1999; World Bank, 2002; Acemoglu, 2003; Rodrik and Subramanian, 2003; Rodrik, Subramanian and Trebbi, 2004; Snowdon, 2002b, 2004b; Sachs *et al.*, 2004; IMF, 2005.

There is no question that institutional differences are definitely the most important factor in explaining the gaps in living standards between North and South Korea, and also those gaps that were generated between East and West Germany during the cold war period. They also explain the differences in lots of other cases such as Austria and Hungary. But institutions are not the most important explanatory factor in explaining the gaps between Mali and France, Ethiopia and the US, and Tanzania and the UK. This is not an argument about geographical determinism, because many things contribute to the economic development outcomes on our planet. The idea that there is a single factor explanation which can satisfactorily account for the pattern of world development amounts to a preposterous misunderstanding of complex systems. The idea that explanations of economic development can be reduced to one variable is one of the shocking trivialisations of this field that has occurred in recent years. I find this more and more amazing the more I find out about the world, and it highlights the fact that economic analysis can too often become detached from reality. To pose such a question as, What deter-me, this is ridiculous! Economic progress is affected by geography, and institutions and geopolitics and policies and history and accident. A large number of complex forces will shape a complex system. Economic development is about complex adaptive evolving systems, that's what we are dealing with. So there are many determinants of the performance of complex systems. The fact that people don't choose to live in the Sahara desert, but do live on the river plains of the Nile or the Ganges in vast numbers is not because of differences in governance. It's because in one place you can't grow food and in the others you can. The fact that people in the majority of mountainous, landlocked regions all over the world tend to be more isolated and find it very difficult or near impossible to engage in international trade, and attract foreign direct investment, is not because of governance, it's because of transport costs.⁴⁵ Economics and economists need to understand that there are physical realities in this world, not just social systems. Physical realities shape how production processes work, what transportation costs are, how communications work, what diseases occur, what population densities occur, how many people can be sus-

⁴⁵ See Faye et al., 2004.

tained, where cities are located, how they trade with one another, and so on. Adam Smith understood all of this very clearly and his book is about geography as well as market institutions. Most economists seem to forget or ignore this. Smith never claimed that economic progress was just about free trade and markets. He also described the implications of being landlocked compared to being located on, or near, the coast. I just don't understand our field when it ignores these obviously important and deeply understood factors that influence the world and regional patterns of development that we observe. Practitioners dealing with regional development, transportation and public health issues know all about the importance of geography. Why has it been a lot more difficult to develop western China than it has been to stimulate development in coastal China?⁴⁶ Why, in spite of its huge land resources, does economic activity in the US congregate predominantly in coastal regions?⁴⁷ It's mainly geography!

There are two main strands in the geography of economic development literature. One strand, associated mainly with the work of economists such as Paul Krugman and Tony Venables,⁴⁸ highlights increasing returns and cumulative causation types of influences, in the spirit of Gunnar Myrdal and Nicholas Kaldor.⁴⁹ I think that Michael Porter's work on clusters and competitiveness can also be linked to this line of thinking.⁵⁰ In the other strand, which you are associated with, emphasis is placed on the direct impact of physical geography, climate and ecology.⁵¹ In what ways can the two approaches be linked?

Paul Krugman follows a long tradition that starts out by asking the question, If we start out by observing a geographical area that is a large, undifferentiated, homogeneous plain, where economic activity can take place, are there reasons why clustering will occur? And there are good economic reasons, such as agglomeration economies and increasing returns to scale, why firms and people may choose to live close together. Krugman's models are simply massive amplifiers of what the initial conditions and geography have already done to disadvantage some places relative to others. In

⁴⁶ See Sachs et al., 2002.

⁴⁷ See Sachs and Rappaport, 2003.

⁴⁸ Krugman, 1999; Krugman and Venables, 1995.

⁴⁹ Myrdal, 1957; Kaldor, 1970.

⁵⁰ Porter, 1996.

⁵¹ Gallup, Sachs and Mellinger, 1999.

Krugman's models, human and physical capital leaves disadvantaged places rather than accumulating and contributing to development. This literature can explain how you can get trapped if you are isolated and operate at insufficient scale. In such a situation you can generate cumulative outcomes where success breeds success, and failure breeds failure. In a lot of Krugman's models he starts out with two locations. A and B. If A gets an initial advantage then, as a result of cumulative processes, B disappears from view. I am saying pretty much the same thing, but I start out from a different perspective, which is the reality that the world is not a homogeneous, undifferentiated plain. There are seas, rivers, plains, mountains, valleys, and deserts. There are cold, wet, dry, and hot climates. There are places where malaria thrives and places where malaria is not transmitted. In my view, extremely difficult geography can lead to poverty traps where the poverty is so extreme that a fight for survival is a day to day occurrence. This is what I have witnessed first hand when I have been in rain-fed, inland, tropical sub-Saharan Africa. The confluence of barriers to development there is huge. Enormous transport costs, a massive disease burden, the fragility of agriculture, a drought-prone climate, and lack of irrigation are the realities. To me, that adds up to a disaster. I believe that these geographical influences are important in shaping the pattern of world history and development, and of our current circumstances. How could they not be influential? I don't think that anyone would disagree that in the pre-industrial era there were good reasons why civilisations grew up on river plains. There were good reasons why the Egyptians lived alongside the Nile rather than in the desert. It had nothing to do with governance, it was to do with the practicalities of growing food. But somehow economists' models have become too divorced from the physical realities in which they are placed. Maybe sitting writing a textbook in a university in the US, an advanced urban economy where transportation problems have to a large extent been overcome in relative terms by the advance of technology, we can justify writing down production functions that include technology, capital and labour, but that ignore natural resources and the physical environment. But if you actually go to poor countries, where the vast majority of the people are living off the land, growing food for their own consumption, relying on inadequate rainfall, fighting the ravages of malaria on a day to day basis, where biomass is the only source of energy, then the physical ecology becomes a profoundly important shaper of life.

So by giving prominence to geographical factors in your explanation of poverty traps, as you mentioned earlier, you are not advocating a new form of geographical determinism.

I am not a geographical determinist. The main point that I make in *The End* of Poverty and in previous work is that even when you identify geographically related causes of poverty, this does not mean that you are advocating geographical determinism. The essence of what we have learned from the experience of the developed world is that there are investments that can, to an important extent, alleviate or even eventually overcome these circumstances. At least we know how to take measures that could keep millions more people alive and healthy. With a real effort we can help these unfortunate countries have some chance of development for themselves and even more for future generations. In my view, the essence of a poverty trap is the following: You find yourself in an extraordinary situation, you can see what needs to be done in terms of the investment requirements, but you cannot afford to make those investments. This is not geographical determinism. What I am saving is that physical geography in a variety of manifestations is shaping circumstances and that geography must be taken into account in the design and financing of public policy. The poorest countries of the world need a positive response from the rich nations to help them face those geographical challenges and escape from their poverty traps.

As a student at Harvard were you ever made aware of the importance of these geographical influences on growth and development?

No. During my training as an economist at Harvard, no-one ever mentioned or seriously discussed the possibility that geography might impact on economic performance. None of this was evident to me when I started out on my research into development issues. This was not an intellectual pursuit where I began by saying geography is really important. I was working for three years in Bolivia before I realised that I should take more account of Bolivia's geography, that it was an isolated mountainous economy. Thank goodness monetary policy works at 12,000 feet, otherwise the stabilisation plan would have failed (*laughter*). I just had not thought about what the significance was of an economy being in a geographical situation like Bolivia. But now I have seen the world as it is from the perspective of more than 100 countries. I have seen terrorist occupied highlands, I have seen tropical lowlands, I have seen deserts, temperate climates, and the tundra. Basically, with this 20-year experience, especially having worked in the low-income world where the physical boundaries of life are so incredibly powerful in shaping survival, the non-homogeneous aspects of the world strike me as being fundamentally important. There are places in the world that have truly difficult physical environments. Countries such as Afghanistan, Mali and Bolivia come to mind. The fact that these countries are impoverished is no accident, and to blame their situation on institutions alone seems to me to be preposterous. It represents a real misunderstanding of what this is all about.

What about the case of Botswana, a country that is frequently hailed as a success story because of its successful policies and institutions?

The geography vs. institutions debate reaches ludicrous extremes at times. In one of Dani Rodrik's edited volumes⁵² the case of Botswana is used as if it was some sort of proof against the geography hypothesis. Botswana is a landlocked tropical country, but also has good governance and a relatively low level of corruption, and is a peaceful society. It has had very successful growth and is one of the few success stories in sub-Saharan Africa. To me, this example illustrates how our profession has lost its basic diagnostics. Botswana was basically a hunter-gatherer society in the Kalahari Desert, until diamonds were discovered and exploited. Without the diamonds there is mass poverty. The discovery of diamonds made Botswana. It is also true that many other countries with diamonds have ended up with civil war. So Botswana had good governance and diamonds which helped it reach a per capita income of about \$3,000. It did not prevent it from becoming the global epicentre of the world AIDS pandemic. Botswana has become the highest AIDS-prevalence country in the entire world. This is clearly geography and institutions interacting. The desire to find single causes of complex phenomena is simply bewildering to me.

In several papers you have investigated another aspect of development related to geographical factors, namely the 'natural resource curse'. It has been observed that

⁵² Rodrik, 2003.

many countries that are richly endowed with natural resources fail to develop or grow as successfully as other countries that have few natural resources.⁵³ What are the main reasons for this curse?

The evidence in favour of the natural resource curse is quite strong, particularly in countries such as Venezuela and Nigeria. Resource abundance, contrary to what might be expected, seems to be an important determinant of economic failure. Explanations include crowding out mechanisms via positive wealth shocks from the natural resource sector that in turn drive up the prices of non-traded goods. This feeds onto wage and other input costs and squeezes the profitability of traded manufacturing activities. The decline in manufacturing then leads to slower export-led growth. Other explanations focus on the political economy determinants of the rent-seeking behaviour and corruption stimulated by the opportunities for rapid enrichment that vast oil revenues offer, especially in non-democratic states where politicians are much less accountable.

Sub-Saharan Africa's poverty trap

The tragedy of sub-Saharan Africa's poverty is now at the centre of international attention and debate.⁵⁴ In your recent co-authored paper, 'Ending Africa's Poverty Trap' (2004), you argue that tropical Africa is 'simply too poor to grow at all' and that what is needed is a 'big push' in order to break this poverty trap. In setting out your theory of Africa's poverty trap, the analysis and language remind me very much of the early development literature of the 1940s and 1950s when Ragnar Nurkse and Richard Nelson popularised the idea of a 'vicious circle of poverty' and a 'low level equilibrium trap'. Harvey Leibenstein also talked of a 'critical minimum effort', Walt Rostow famously invoked the idea of 'preconditions' for a 'take-off' into 'self sustaining growth', and Paul Rosenstein-Rodan advocated that a 'big push' is necessary if the poor countries are to get the process of economic growth started.⁵⁵ What leads you to that conclusion that a 'big push' is necessary to get growth started?

⁵³ See Sachs and Rodriguez, 1999; Sachs and Warner, 1999, 2001; Auty, 2001; Sala-i-Martin and Subramanian, 2003; Bulte, Damania and Deacon, 2005.

⁵⁴ See Easterly and Levine, 1997; Sachs and Warner, 1997a; Woglin, 1997; Collier, 1998; Collier and Gunning, 1999a, 1999b; Sender, 1999; Sachs, 2000b, 2001a, 2003b, 2005b, 2005c, 2005d; Bigsten, 2002; Artadi and Sala-i-Martin, 2003; Easterly, Devarajan and Pack, 2003; Sahn and Stifel, 2003; Sachs and McArthur, 2005.

⁵⁵ For a discussion of these ideas see Todaro and Smith, 2003. See also Easterly, 2005.

You are exactly right about the link with the earlier development literature. In 1956, Richard Nelson published his great paper on poverty traps, at the same time that Robert Solow published his seminal paper on neoclassical growth theory.⁵⁶ To me, economic theory is about having tools to understand the range of possible diagnostics. Theory alone, in almost all cases, does not allow us to identify the nature of the world. It reminds us of the range of possibilities. So there are a lot of poverty trap theories such as Nurkse's idea of a vicious circle of poverty. Nelson's demographic trap model, Murphy, Shleifer and Vishny's increasing returns-big push type model, and Ben-David's low saving rate in subsistence economy model.⁵⁷ What I try to do in my work is help to choose which among these various theories can help us understand the situation in tropical Africa. Clearly the US is not stuck in a poverty trap, and these types of model do not apply to the developed countries of the world. I don't think Argentina is stuck in a poverty trap. It is certainly stuck, but not because of a poverty trap. But Rwanda is stuck in a poverty trap and for most sub-Saharan African countries nothing short of a massive co-ordinated development effort, a big push, is needed if sustained poverty reduction and the achievement of the Millennium Development Goals is to be realised within an acceptable time horizon. The conventional Solow model is not an appropriate tool of analysis for poverty trap situations.

What are the deficiencies of the Solow growth model in these situations of extreme impoverishment?

Typically economists begin by setting out the basic Solow model and then introduce the Inada conditions which say that the marginal product of capital becomes infinite at low levels of capital per worker.⁵⁸ That makes the curves in the familiar Solow diagram just the right shape so that you do not get a trap.⁵⁹ Remarkably, it took me twenty years to realise the implications

⁵⁶ See Snowdon and Vane, 2005, chapter 11, for an extensive discussion of growth theory.

⁵⁷ See Nurkse, 1953; Nelson, 1956; Leibenstein, 1957; Murphy, Shleifer and Vishny, 1989; Ben-David, 1998. ⁵⁸ The Inada conditions specify that for a neoclassical production function, Y = F[K, L], all values of K > 0 and L > 0, F(L, K) exhibits positive but diminishing marginal returns with respect to both capital and labour, that is, $\partial F/\partial K > 0$, $\partial^2 F/\partial K^2 < 0$, $\partial F/\partial L > 0$, and $\partial^2 F/\partial L^2 < 0$. Second, the production function exhibits constant returns to scale such that $F(\lambda K, \lambda L) = \lambda Y$, that is, raising inputs by λ will also increase aggregate output by λ . Third, the marginal product of capital will approach infinity as capital approaches zero. See Snowdon and Vane, 2005, for a discussion of the Solow growth model.

⁵⁹ See Sachs et al., 2004, pp. 124-30.

of that innocently slipped-in mathematical condition. I have visited lots of impoverished places and I am absolutely convinced that the marginal product of capital is not infinite! For small investments it is more likely to be zero, because if a village is 100 kilometres in the hinterland, and you pave the first kilometre of road, it doesn't get you very far. Some minimum threshold of physical and human capital is necessary before modern production can begin. So I am prepared to believe that there are indivisibilities, increasing returns to scale and very low marginal productivities to capital in impoverished environments. This problem is compounded by savings behaviour at subsistence levels of income. Only when households can meet their basic needs will they begin to save. Furthermore, population growth increases as incomes rise from very low levels. A combination of the need for a minimum capital threshold together with savings and population traps can cause a serious poverty trap. So let us all make a greater effort to understand that our economic theories give us a menu of possibilities rather than definitive answers. Unfortunately, the standard way of teaching the subject of economic growth does not help. The conventional Solow model works reasonably well in describing the growth experience of developed countries, but has an unjustified inbuilt optimism with respect to the prospects of convergence for very poor countries.

The role of foreign aid

An explicit theme in your End of Poverty book, and other recent work, is the crucial need for an increase in aid if we are really serious about ending the tragedy of poverty in sub-Saharan Africa and other impoverished parts of the world. Beginning with the success of the Marshall Plan, the foreign aid debate has a long history in the development literature, and there are many economists who are highly sceptical of the idea that sustained economic development can be effectively promoted by injections of aid. Over the last fifty years these include Milton Friedman, Peter Bauer, and, more recently, William Easterly who describes the foreign aid lobby as a 'cartel of good intentions'.⁶⁰ In the recent debate, many critics of foreign aid point to the poor governance and corruption problems that seem to pervade sub-Saharan Africa. In their view, any increase in aid flows is likely to be wasted

⁶⁰ See Friedman, 1958; Bauer, 1972; Boone, 1996; Easterly, 2001, 2003a, 2003b, 2004, 2005; Easterly, Levine and Roodman, 2005; Snowdon, 2003b. See also the lively exchange of views on aid between Sachs and Easterly in the *Washington Post*, 13 and 27 March, 2005.

or be appropriated by kleptocrats.⁶¹ What do you say to these critics, and what role can foreign aid play in a solution to the poverty trap in sub-Saharan Africa?

I think there are two issues that are important here. First, do the impoverished countries really need foreign aid to help them accomplish their development goals? Yes they do! During the United Nations Millennium Summit in 2000, the heads of state of 147 countries adopted the Millennium Development Goals with quantitative targets for 2015. With current aid flows, sub-Saharan Africa is clearly not going to meet those targets.⁶² Second, if aid is necessary, is it also sufficient? No, aid needs to be combined with other important measures, including improved governance and trade reform in the developed countries. On the first question, if you subscribe to the basic Solow growth model and its recent variants, you can take the view that every country in the world can develop and grow because there is no such thing as a poverty trap. Countries that are failing to develop must be doing something wrong, so they should correct those problems and get on with it. That view has become a very dominant view of the development problem, especially from a 'Washington Consensus' perspective over the last twenty-five years.⁶³ I think this perspective is absolutely wrong, and that is the key point that I have been trying to get over in recent years. It is not simply that impoverished places have only themselves to blame. Their particular circumstances matter, including geographical constraints. The formal implications of this perspective, as a matter for theory and practice, are that if countries are really caught in a poverty trap and aren't simply suffering because of bad governance, then the idea of external help becomes a logical corollary. If impoverished countries cannot break out of the trap by their own efforts, then either the people of these countries will be left to suffer and die, or they can be helped. So the case for foreign assistance is based on an analysis of the sources of poverty that does not accept that failure to develop and grow is for the most part self-inflicted and can be cured by a few lectures on how to improve governance. The problem is more structural, with identifiable causes. This is why I am interested in promoting a 'Green Revolution' in Africa, help to control malaria, and help to overcome economic isolation by investing in infrastructure

⁶¹ See Rowley, 2000; Svensson, 2000.

⁶² Sachs, 2003b.

⁶³ See Snowdon, 2001.

developments. So that's the underlying philosophical base that links the aid debate to our earlier discussion about geography and development.

What are the main objections to these ideas?

The objections come in two forms. One goes under the fancy name of 'Dutch disease' type arguments. That is, too much help is bad for your health. There are many variants of this argument, most of which I regard as simply wrong. Second, there is the real issue of agency, because there is a problem of responsibility attached to aid inflows. How do you ensure that the extra resources made available turn into the kind of investments that are growth-promoting and poverty-reducing rather than fuelling the consumption of a rich kleptocratic elite? This is a question of mechanisms and incentive structures. Unfortunately, I think that economists in general have come to view the whole question of foreign aid as a playground rather than a really important issue. On the one hand, I see millions of people dving, and on the other, I see an academic debate that I do not find commensurate with the challenge. Is it really below our capabilities to get insecticide-treated bed nets out to the villages to people who really need them? Should we have to argue endlessly about such a proposition? Can't we even try it in a few places?⁶⁴ Instead we see this great generalised debate on aid. The way that this debate is handled analytically I also find preposterous. Running endless regressions of aggregate aid as an explanatory variable of aggregate economic performance is the most ridiculous kind of approach to these issues that I can think of.

Why do you say that?

Because it involves taking very poorly measured variables that have multiple determinants and trying to find simple correlations in the data. So either you find a relationship or you don't and you declare your results. Surely this issue deserves a great deal more subtlety than this. Even the simplest partition of aid flows that distinguishes between aid for emergency relief from aid that actually went for investment actually turns out to make a big difference in the regression results.⁶⁵

⁶⁴ Sachs, 2002b.

⁶⁵ See Jamison and Radelet, 2005; Radelet, Clemens and Bhavnani, 2005.

How should economists assess the impact of aid flows to developing countries?

I would say that if someone is really serious about the aid issue they should take a micro perspective and take a detailed look at aid for immunisation purposes, or aid for the eradication of smallpox or measles, for example. They should ask questions such as, What is the most effective way to get anti-malaria bed nets to the people who need them? What are the incentive structures that need to be put in place to make sure that aid gets to the intended recipients? What we don't need are these gross over-the-top generalisations that end up saving. This is good for you or this is bad for you. I would like economists to take the whole question of aid more seriously, remembering that millions of lives depend on political decisions that are influenced by our research findings. The issue deserves more than intellectual games. We need to deal with practical grounded concerns that address the substantive realities of tropical African circumstances. I know of innumerable successful aid programmes of significant scale. Many diseases have been successfully controlled, even in the most desperate of circumstances. Many immunisation campaigns have been successful. The recent campaign to get 900,000 anti-malaria bed nets out to Togo worked because it was linked to a measles immunisation programme and involved free distribution. I believe that we now have all sorts of possibilities, that were not available twenty years ago, for monitoring and auditing aid distribution using modern information technology. Let me make it quite clear that the last thing that I am advocating is issuing blank cheques and throwing money at problems. A reasonable level of governance in the poor recipient countries is a necessary precondition if increased aid flows are to be effective. So I clearly recognise the need for an accountable approach to aid. What I am saying is, let us take seriously specific challenges, such as how do we get soil nutrients to smallholder farmers in Africa whose soils are depleted and cannot afford fertilisers, or how do we get malaria under control, and let us deal with these problems in a hard-headed, systematic, evidence-based manner. It is even more frustrating when I hear from Washington that they are ready to go and spend 300 billion dollars on the Iraq war, supposedly to bring freedom, and yet washes its hands of getting bed nets to help prevent children getting malaria in Africa. How can we take such a position seriously? The same people that brought us a full scale war costing 80 billion dollars per year in aid that gets blown up,

literally, might have the gumption to at least ask how we may initiate a programme of bed net deliveries to impoverished villages. Surely this is a lot easier than fighting battles in the city of Fallujah! But Washington doesn't want to take on that particular humanitarian challenge.

Trade, openness and growth

Your 1995 paper with Andrew Warner, 'Economic Reform and the Process of Global Integration', has been very influential and heavily cited in the recent growth and development literature.⁶⁶ As in the case of foreign aid, there has been an important ongoing debate on the relationship between openness, growth, and poverty reduction.⁶⁷ In The End of Poverty, you advocate aid combined with 'enlight-ened globalisation' as the best way forward for the poorest developing countries. So your central message seems to be that both trade and aid are necessary engines of progress for the poorest countries of the world.

That's right. First of all I am a firm advocate of trade as an engine of growth. I do not buy the anti-free trade sentiments of some parts of the anti-globalisation movement.⁶⁸ These sentiments make no sense to me as an economist. In our 1995 paper, we show that more open economies tend to exhibit faster rates of convergence towards the living standards of rich countries than is the case with closed economies. I also do not believe that 'exploitation' by multinational companies is a major part of the explanation of the distribution of wealth and poverty in the world. The impoverished places that I have been working in have been completely bypassed by globalisation! There is not a factory to be found and no multinationals come to these places to 'exploit' them. I am not saving that there are no important issues relating to multinational companies. Of course many multinational companies sometimes behave very badly. But their questionable behaviour does not explain the phenomenon of extreme poverty. Extreme poverty is not caused by exploitation by multinational companies. It is caused by factors such as isolation, drought, disease, poor infrastructure, and bad governance. However, globalisation must not be treated as a panacea. The slogan 'trade not aid' is preposterous, because trade does

⁶⁶ See also, Sachs and Warner, 1997b.

⁶⁷ See Snowdon, 2002a, 2002b; Dollar and Kraay, 2004.

⁶⁸ Sachs, 1995.

not even reach into the highlands of East Africa, the Andes or the Himalayas, or the drought-stricken Sahel, except in a limited way involving a narrow range of primary commodities, that does not lead to development. In these areas we do not see the diversified trade that we know to be the hallmark of successful economic development. The extremes on both sides of this particular debate have it wrong. Being anti-globalisation is no answer. But globalisation, when viewed as a silver bullet for the problems of developing countries, is equally naïve. So the 'trade not aid' view is also completely wrong. Very poor countries clearly need both.

What exactly do you mean by enlightened globalisation?

By 'enlightened globalisation', I mean we need to take an honest look at the planet. You cannot trade if you don't have a healthy, connected, and skilled population as a base for new industries. That is why investments in health, education and infrastructure are all a vital prerequisite for moving up the development ladder. It also means that you can be pro-trade and in favour of core labour standards. The fact that multinational firms are not the cause of extreme impoverishment does not eliminate the need for them to behave in a civilised and legal manner. They sometimes pay bribes and behave in an unethical way, but, I repeat, they do not cause fundamental poverty. Enlightened globalisation means that we need to understand the real contours of globalisation and respond appropriately in the places where it cannot solve the crises that we observe. It is also important to promote market forces where they can be important engines of development.

Odious debt

Throughout your career, you have written a great deal about various aspects of the international debt problem, and have also been involved with the Jubilee 2000 campaign to cancel the international debt of the world's poorest countries.⁶⁹ In some interesting research, Michael Kremer has been promoting the idea of 'Odious Debt', that is, sovereign debt incurred by political leaders—usually unelected and unaccountable dictators—who borrowed and wasted vast sums of money.⁷⁰ The regimes

⁶⁹ See Sachs and Williamson, 1986; Sachs, 1990, 2002c.

⁷⁰ Kremer and Jayachandran, 2002.

of Anastasio Somoza in Nicaragua, Mobutu Sese Seko in Zaire, and the Marcos regime in the Philippines come to mind. Iraq's debts incurred by Saddam Hussein would also certainly qualify as 'odious'. The basic idea is that such debt should not be transferable to successor governments. Are you enthusiastic about such an idea and do you see 'odious debt' as a workable concept?

That's a tough question. I am sympathetic to the idea but I have taken a somewhat different view. I of course agree with Michael Kremer that certain debts need to be forgiven, and his view is that certain debts ought not to be enforceable at all. There are two aspects that concern me with his approach. First, even non-odious debt should be forgiven in many circumstances. So I don't think that the answer to sub-Saharan Africa's debt problem depends so much on where the debt came from, as opposed to what the current implications are of the accumulated debt. Some countries get themselves into a mess through bad luck or bad governance and in my view these countries need help. Societies should not be trapped by debt when it is a life and death issue. Second, I am not sure that we know, or can define what 'odious' means in a clear-cut, unambiguous way. Tastes vary a lot about what is or what is not good governance. I worry that rich and powerful countries are likely to manipulate decisions on which debts are to be defined as odious. I would not want to see the Pentagon deciding whose debts are odious and whose are not. So the applicability of the concept worries me. However, there is something particularly troubling about a brutal dictatorship that takes on debt by mortgaging national assets and then the citizens of that country, for decades to come, having to pay for that debt. After all, in most countries private citizens are not responsible for the repayment of debt incurred in their name by fraudsters. So I sympathise with the idea, but have a problem seeing how the idea can be put into operation.

Global inequality and failed states

In your paper 'The Strategic Significance of Global Inequality' (2001b), you argue that economic failure in poor countries leads to state failure, and this in turn creates the 'seedbeds of violence, terrorism, international criminality, mass migration and refugee movements, drug trafficking and disease'.⁷¹ Therefore you suggest that

⁷¹ See also, Fukuyama, 2004.

it is in the self-interest of the United States to help reduce international inequalities and promote economic development abroad by increasing, and making better use of its capacity for foreign assistance. There is an important war on poverty to be fought that is complementary to US concerns about terrorism and failed states. While I think that Tony Blair and Gordon Brown in the UK are persuaded by this line of argument, how are you going to sell it to President George Bush in the US?⁷²

That particular paper was written before September 11 and I think that event makes the analysis in that paper even more relevant. Rhetorically, the same arguments have now been echoed at many levels of US official policy. Many of George Bush's speeches highlight essentially the same idea. The US National Security Doctrine of 2002 says that overseas economic development is a core part of US security for reasons that I cite in that paper. The Congressional Budget justification for the State Department's budget this year has a nice, and I think correct, approach when it says that US national security rests on three pillars: defence, diplomacy, and development. My complaint is not with the State Department, USAID, the White House, or the CIA in their analysis of the causes of state failure, but rather with the lack of commitment to make the necessary investments to correct the problem. So they have the diagnosis right but are still investing \$500 billion in the military pillar of the strategy but only \$16 billion in the development pillar. However, when you look more closely at the \$16 billion, you find that at least half of that is in fact defence investment, because it is going to strategic countries and there is little development component to the spending. The actual allocation of spending to real development projects in Africa is under \$2 billion per year. To me, this is a massive misallocation of resources between these three pillars, and we need to take all three pillars seriously. The hardest thing is to get Washington to do arithmetic. They are very good at slogans and there are a lot of projects waiting on the shelf, but the actions do not match the rhetoric. So my overriding and frequently given advice to Washington these days is, Do the arithmetic! The bottom line is this. Economic failure can breed state failure, and failed states, as we have seen, are the breeding ground of political extremism, terrorism, massive refugee movements, and international criminality. As I pointed out in that paper, there

⁷² See Radelet, 2003.

are numerous historical examples of economic crisis leading to political change that proved to be disastrous for the world. The Bolshevik seizure of power in 1917, Hitler's seizure of power in 1933, the disintegration of Yugoslavia, and the situation in Afghanistan come to mind.

Philosophical approach

Almost twenty years ago, Alan Blinder wrote a book entitled, Hard Heads Soft Hearts: Tough Minded Economics for a Just Society. Your approach to economics and policy reminds me of Blinder's philosophy, namely, that you need to start out your assessment of any significant political economy problem with solid economic analysis, including a recognition of the power of markets. However, at the same time it is important to combine this with a 'soft-hearted concern for society's underdogs'. You appear to be extending this philosophy to the international sphere. Is this a reasonable summary of your overall philosophy?

It is. I am certainly hard headed in the sense that I believe in the power and importance of sound economic analysis when it comes to understanding and dealing with important issues of public policy. The soft-hearted aspect has two dimensions. One is the need to recognise that our humanity calls on us to do something about world poverty. Some people express this message in a religious way, others do it in a secular-ethical way. But I feel very strongly about the humanitarian dimension to the whole issue of international poverty. There are about one billion people who on a daily basis have to struggle to exist. To me the objective of ending extreme impoverishment, of achieving the Millennium Development Goals, is a grand moral task, and this challenge can be met by our generation.⁷³ There are numerous low-cost interventions that can make a profound difference to the lives of the poor of this world. There is also a hard-headed dimension which asks the question. What kind of world will give value to everybody's life, regardless of race or nationality? As an economist I think that if we profoundly devalue life on the margin, because we say that poor people living on the continent of Africa are expendable because to help fix the problems will cost us \$1 per person per day, then I have a feeling that there is likely to be an arbitrage relationship that comes into play, namely

⁷³ Sachs, 2005e.

that the rest of the world won't value the lives of my children. So the kind of violence and horrific treatment of humans by other humans that pervades the world should be challenged by a practical philosophy that says that we should take seriously the value of others' lives, and do that on a regular, rigorous and sustained basis. I believe that this philosophy should form the basis of how we organise society so that all our lives are similarly taken seriously. That is the practical side of ethics and I believe in it.

References

Acemoglu, D. (2003), 'A Historical Approach to Assessing the Role of Institutions in Economic Development', *Finance and Development*, June.

Alesina, A. and D. Dollar (2000). 'Who Gives Aid to Whom and Why?', *Journal of Economic Growth*, March.

Alesina, A. and B. Weder (2001), 'Do Corrupt Governments Receive less Foreign Aid', *American Economic Review*, September.

Artadi, E. and X. Sala-i-Martin (2003), 'The Economic Tragedy of the Twentieth Century: Growth in Africa', *National Bureau of Economic Research Working Paper*, No. 9865, July.

Auty, R. M. (2001), 'The Political Economy of Resource Driven Growth', *European Economic Review*, May.

Bauer, P. (1972), Dissent on Development, London: Weidenfeld and Nicholson.

Ben-David, D. (1998), 'Convergence Clubs in Subsistence Economies', *Journal of Development Economics*, February.

Bigsten, A. (2002), 'Can Africa Catch Up?', *World Economics*, Vol. 3, No. 2 (April–June).

Blinder, A. S. (1987), *Hard Heads, Soft Hearts: Tough-Minded Economics for a Just Society*, New York: Addison Wesley.

Bloom, D. E and J. D. Sachs (1998), 'Geography, Demography and Economic Growth in Africa', *Brookings Papers on Economic Activity*, No. 2.

Boone, P. (1996), 'Politics and the Effectiveness of Foreign Aid', *European Economic Review*, Vol. 40, No. 2.

Brandt, W. (1980), North–South: A Program for Survival (The Brandt Report), Cambridge MA: MIT Press (1990).

Brautigam, D. A. and S. Knack (2004), 'Foreign Aid, Institutions, and Governance in Sub-Saharan Africa', *Economic Development and Cultural Change*, January.

Bruno, M. and J. D. Sachs (1985), *Economics of World-wide Stagflation*, Cambridge MA: Harvard University Press.

Bulte, E. H., R. Damania and R. T. Deacon (2005), 'Resource Intensity, Institutions and Development', *World Development*, Vol. 33, No. 7.

Burnside, C. and D. Dollar (2000), 'Aid, Policies and Growth', American Economic Review, September.

Cagan, P. (1956), 'The Monetary Dynamics of Hyperinflation' in M. Friedman (ed.), *Studies in the Quantity Theory of Money*, Chicago: University of Chicago Press.

Cassen, R. et al. (1994), Does Aid Work?, Second Edition, Oxford: Clarendon Press.

Chenery, H. B. and A. M. Strout (1966), 'Foreign Assistance and Economic Development', *American Economic Review*, September.

Collier, P. (1998), *Living Down the Past: How Europe can Help Africa to Grow*, London: IEA.

Collier, P. and J. Gunning (1999a), 'Explaining African Economic Performance', *Journal of Economic Literature*, March.

Collier, P. and J. Gunning (1999b), 'Why has Africa Grown So Slowly?', *Journal of Economic Perspectives*, Summer.

Commission for Africa (2005), *Our Common Interest: Report of the Commission for Africa*, London: Penguin.

DeLong, J. B. and B. Eichengreen (1993), 'The Marshall Plan: History's Most Successful Structural Adjustment Programme', in R. Dornbusch, W. Nolling and R. Layard (eds), *Post-War Reconstruction and Lessons for the East Today*, Cambridge: MIT Press.

Dollar, D. and A. Kraay (2002), 'Growth is Good for the Poor', *Journal of Economic Growth*, September.

Dollar, D. and A. Kraay (2004), 'Trade, Growth, and Poverty', *Economic Journal*, February.

Jeffrey Sachs interviewed by Brian Snowdon

Easterly, W. (2001), *The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics*, Cambridge, MA: MIT Press.

Easterly, W. (2003a), 'Can Foreign Aid Buy Growth?', *Journal of Economic Perspectives*, Summer.

Easterly, W. (2003b), 'A Cartel of Good Intentions: The Problem of Bureaucracy in Foreign Aid', *Policy Reform*, Vol. 5, No. 4.

Easterly, W. (2004), 'Can Foreign Aid Make Poor Countries More Competitive?', in M. Porter, K. Schwab, X. Sala-i-Martin and A. Lopez-Claros (eds), *The Global Competitiveness Report 2004–05*, Basingstoke: Palgrave Macmillan.

Easterly, W. (2005), 'Reliving the 50s: The Big Push, Poverty Traps, and Takeoffs in Economic Development', *Centre for Global Development Working Paper* No. 65, August.

Easterly, W. and R. Levine (1997), 'Africa's Growth Tragedy: Policies and Ethnic Divisions', *Quarterly Journal of Economics*, November.

Easterly, W., S. Devarajan, and H. Pack (2003), 'Low Investment is Not the Constraint on African Development', *Economic Development and Cultural Change*, April.

Easterly, W., R. Levine and D. Roodman (2004), 'New Data, New Doubts: A Comment on Burnside and Dollar's Aid Policies and Growth', *American Economic Review*, June.

Eichengreen, B. (1984), 'Keynes and Protection', Journal of Economic History, June.

Eichengreen, B. and J. D. Sachs (1985), 'Exchange Rates and Economic Recovery in the 1930s', *Journal of Economic History*, December.

Faye, M. L., J. W. McArthur, J. D. Sachs and T. Snow (2004), 'The Challenges Facing Landlocked Developing Countries', *Journal of Human Development*, March.

Fischer, S. (1993), 'Socialist Economy Reform: Lessons of the First Three Years', *American Economic Review*, May.

Friedman, M. (1956), 'The Quantity Theory of Money, A Restatement' in M. Friedman (ed.), *Studies in the Quantity Theory of Money*, Chicago: University of Chicago Press.

Friedman, M. (1958), 'Foreign Economic Aid: Means and Objectives', *Yale Review*, Vol. 47.

Fukuyama, F. (2004), *State Building: Governance and World Order in the Twenty- First Century*, London: Profile Books.

Gallup, J., J. D. Sachs and A. Mellinger (1999), 'Geography and Economic Development', *International Regional Science Review*, August.

Hudson, J. et al. (2004), 'Aid and Development', Economic Journal, June.

International Monetary Fund (2005), World Economic Outlook, www.imf.org

Jamison, D. T. and S. Radelet (2005), 'Making Aid Smarter', *Finance and Development*, June.

Kaldor, N. (1970), 'The Case for Regional Policies', *Scottish Journal of Political Economy*, November.

Keynes, J. M. (1919), The Economic Consequences of the Peace, London: Macmillan.

Keynes, J. M. (1923), A Tract on Monetary Reform, London: Macmillan.

Keynes, J. M. (1936), *The General Theory of Employment, Interest and Money*, London: Macmillan.

Kremer, M. and S. Jayachandran (2002), 'Odious Debt', *National Bureau of Economic Research Working Paper*, No. 8953, May.

Krugman, P. (1999), 'The Role of Geography in Development', *International Regional Science Review*, August.

Krugman, P. and A. Venables (1995), 'Globalisation and the Inequality of Nations', *Quarterly Journal of Economics*, November.

Kunz, D. B. et al. (1997), 'The Marshall Plan and Its Legacy', Foreign Affairs, May/June.

Leibenstein, H. (1957), Economic Backwardness and Economic Growth, New York: Wiley.

Lewis, W. A. (1954), 'Economic Development with Unlimited Supplies of Labour', *Manchester School of Economic and Social Studies*, May.

McArthur, J. W. and J. D. Sachs (2001), 'The Growth Competitiveness Index: Measuring Technological Advancement and Stages of Development' in *The Global Competitiveness Report 2001–02*, New York: Oxford University Press.

Murphy, K. M., A. Shleifer, and R. W. Vishny (1989), 'Industrialisation and the Big Push', *Quarterly Journal of Economics*, May.

Myrdal, G. (1957), Economic Theory and Underdeveloped Regions, London: Methuen.

Nelson, R. R. (1956), 'A Theory of the Low Level Equilibrium Trap', *American Economic Review*, December.

WORLD ECONOMICS • Vol. 6 • No. 4 • October–December 2005

Jeffrey Sachs interviewed by Brian Snowdon

Nurkse, R. (1953), *Problems of Capital Formation in Underdeveloped Countries*, New York: Oxford University Press.

Pearson, L. B. (1969), Partners in Development: Report of the UN Commission on International Development (Pearson Report), New York: Praeger.

Porter, M. E. (1996), 'Competitive Advantage, Agglomeration Economies, and Regional Policy', *International Regional Science Review*, Vol. 19, Nos. 1 & 2.

Quibria, M. G. (2005), 'Rethinking Development Effectiveness: Facts, Issues and Policies', *World Economics*, Vol. 6, No. 1 (January–March).

Radelet, S. (2003), 'Bush and Foreign Aid', Foreign Affairs, September-October.

Radelet, S., M. Clemens and R. Bhavnani (2005), 'Aid and Growth', *Finance and Development*, September.

Rajan, R.G. and A. Subramanian (2005a), 'What Undermines Aid's Impact on Growth?', *International Monetary Fund Working Paper*, No. 05/126, June.

Rajan, R. G. and A. Subramanian (2005b), 'Aid and Growth: What Does the Cross-Country Evidence Really Show?', *International Monetary Fund Working Paper*, No. 05/127, June.

Riddell, R. C. (1987), *Foreign Aid Reconsidered*, Baltimore: Johns Hopkins University Press.

Rodrik, D. (ed.) (2003), In Search of Prosperity: Analytic Narratives on Economic Growth, Princeton: Princeton University Press.

Rodrik, D. and A. Subramanian (2003), 'The Primacy of Institutions', *Finance and Development*, June.

Rodrik, D., A. Subramanian and F. Trebbi (2004), 'Institutions Rule: The Primacy of Institutions Over Geography and Integration in Economic Development', *Journal of Economic Growth*, June.

Rowley, C. K. (2000), 'Political Culture and Economic Performance in Sub-Saharan Africa', *European Journal of Political Economy*, March.

Sachs, J. D. (1987), 'The Bolivian Hyperinflation and Stabilisation', *American Economic Review*, May.

Sachs, J. D. (1990), 'A Strategy for Efficient Debt Reduction', *Journal of Economic Perspectives*, Winter.

Sachs, J. D. (1993), Poland's Jump to the Market Economy, Cambridge, MA: MIT Press.

Sachs, J. D. (1995), 'The Age of Global Capitalism', Foreign Policy, Spring.

Sachs, J. D. (1996a), 'The Transition at Mid Decade', American Economic Review, May.

Sachs, J. D. (1996b), 'Economic Transition and Exchange Rate Regime', *American Economic Review*, May.

Sachs, J. D. (1999), 'Twentieth-Century Political Economy: A Brief History of Global Capitalism', *Oxford Review of Economic Policy*, December.

Sachs, J. D. (2000a), 'Notes on a New Sociology of Economic Development', in L. E. Harrison and S. P. Huntington (eds), *Culture Matters: How Values Shape Human Progress*, New York: Basic Books.

Sachs, J. D. (2000b), 'A New Map of the World', The Economist, 24 June.

Sachs, J. D. (2001a), 'The Geography and Poverty of Wealth', *Scientific American*, March.

Sachs, J. D. (2001b), 'The Strategic Significance of Global Inequality, *The Washington Quarterly*, Summer.

Sachs, J. D. (2002a), 'A New Global Effort to Control Malaria', Science, October.

Sachs, J. D. (2002b), 'Weapons of Mass Salvation', The Economist, 26 October.

Sachs, J. D. (2002c), 'Resolving the Debt Crisis in Low-Income Countries', *Brookings Papers on Economic Activity*, No.1.

Sachs, J. D. (2003a), 'Institutions Matter, But Not For Everything', *Finance and Development*, June.

Sachs, J. D. (ed.) (2003b), *Millennium Development Goals: A Compact Among Nations to End Poverty—Human Development Report 2003*, New York: United Nations.

Sachs, J. D. (2005a), *The End of Poverty: How We Can Make It Happen In Our Lifetime*, New York: Penguin Press.

Sachs, J. D. (2005b), 'The End of Poverty', Time Magazine, 14 March.

Sachs, J. D. (2005c), 'The Development Challenge', Foreign Affairs, March/April.

Sachs, J. D. (2005d), 'The Mission: To Free Africa from War, Poverty and Disease', *Sunday Times Magazine*, 3 July.

Sachs, J. D. (2005e), 'Can Extreme Poverty Be Eliminated?', *Scientific American*, September.

WORLD ECONOMICS • Vol. 6 • No. 4 • October–December 2005

Jeffrey Sachs interviewed by Brian Snowdon

Sachs, J. D. and P. Larrain (1992), *Macroeconomics in the Global Economy*, New York: Prentice Hall.

Sachs, J. D. and D. Lipton, (1992), 'Prospects for Russia's Economic Reforms', *Brookings Papers on Economic Activity*, No. 2.

Sachs, J. D. and J. W. McArthur (2001), 'Institutions and Geography: Comment on Acemoglu, Johnson and Robinson', *National Bureau of Economic Research Working Paper*, No. 8114, February.

Sachs, J. D. and J. W. McArthur (2005), 'A Plan for Meeting the Millennium Development Goals', *The Lancet*, 22 January.

Sachs, J. D. and J. Rappaport, (2003), 'The United States as a Coastal Nation', *Journal of Economic Growth*, March.

Sachs, J. D. and F. Rodriguez (1999), 'Why Do Resource-Abundant Economies Grow More Slowly?', *Journal for Economic Growth*, September.

Sachs, J. D. and A. M. Warner (1995), 'Economic Reform and the Process of Global Integration', *Brookings Papers on Economic Activity*, No.1.

Sachs, J. D. and A. M. Warner (1997a), 'Sources of Slow Growth in African Economies', *Journal of African Economies*, Vol. 6, No. 3.

Sachs, J. D. and A. M. Warner (1997b), 'Fundamental Sources of Long-Run Growth', *American Economic Review*, May.

Sachs, J. D. and A. M. Warner (1999), 'The Big Push, Natural Resource Booms and Growth', *Journal of Development Economics*, June.

Sachs, J. D. and A. M. Warner (2001), 'The Curse of Natural Resources', *European Economic Review*, May.

Sachs, J. D. and J. Williamson (1986), 'Managing the LDC Debt Crisis', Brookings *Papers on Economic Activity*, No. 2.

Sachs, J. D. and W. T. Woo (1994), 'Structural Factors in the Economic Reforms of China, Eastern Europe, and the Former Soviet Union', *Economic Policy*, April.

Sachs, J. D. and W. T. Woo (1997), 'Understanding China's Economic Performance', *Development Discussion Paper, No. 575, Harvard Institute for International Development,* March.

Sachs, J. D., D. Lipton and L. Summers (1990), 'Privatisation in Eastern Europe: The Case of Poland', *Brookings Papers on Economic Activity*, No. 2.

Sachs, J. D., W. T. Woo and S. Parker (eds) (1997), *Economies in Transition*, Cambridge, MA: MIT Press.

Sachs, J. D., D. Lipton, S. Fischer and J. Kornai (1990), 'Creating a Market Economy in Eastern Europe', *Brookings Papers on Economic Activity*, No. 1.

Sachs, J. D. *et al.* (2002), 'Geography, Economic Policy, and Regional Development in China', *Asian Economic Papers*, Winter.

Sachs, J. D. et al. (2004), 'Ending Africa's Poverty Trap', Brookings Papers on Economic Activity, No. 1.

Sachs, J. D. et al. (2005), Investing in Development: A Practical Plan to Achieve the Millennium Development Goals, United Nations Millennium Project, New York: Earthscan.

Sahn, D. and D. Stifel (2003), 'Progress Towards the Millennium Development Goals in Africa', *World Development*, January.

Sala-i-Martin, X. and A. Subramanian (2003), 'Addressing the Natural Resource Curse: An Illustration from Nigeria." *NBER Working Paper*, No. 9804, June.

Sargent, T. J. (1982), 'The End of Four Big Inflations', in R. H. Hall (ed.), *Inflation: Causes and Effects*, Chicago: University of Chicago Press.

Schumpeter, J. A. (1943), *Capitalism, Socialism and Democracy*, London: Unwin University Books.

Sender, J. (1999), 'Africa's Economic Performance: Limitations of the Current Consensus', *Journal of Economic Perspectives*, Summer.

Shleifer, A. and D. Treisman (2005), 'A Normal Country: Russia After Communism', *Journal of Economic Perspectives*, Winter.

Smith, A. (1776), An Inquiry into the Nature and Causes of the Wealth of Nations, R. H. Campbell and A. S. Skinner (eds) (1976), Oxford: Clarendon.

Snowdon, B. (2001), 'Redefining the Role of the State: Joseph Stiglitz on Building a "Post-Washington Consensus", *World Economics*, Vol. 2, No. 3 (July–September).

Snowdon, B. (2002a), *Conversations on Growth Stability and Trade: An Historical Perspective*, Cheltenham: Edward Elgar.

Snowdon, B. (2002b), 'Should We Be Globaphobic About Globalisation?: Dani Rodrik on the Economic and Political Implications of Increasing International Economic Integration', *World Economics*, Vol. 3, No. 4 (October–December).

Jeffrey Sachs interviewed by Brian Snowdon

Snowdon, B. (2003a), 'From Socialism to Capitalism and Democracy: János Kornai on the Trials of Socialism and Transition', *World Economics*, Vol. 4, No. 1 (January–March).

Snowdon, B (2003b), 'In Search of the Holy Grail: William Easterly on the Elusive Quest For Growth and Development', *World Economics*, Vol. 4, No. 3 (July–September).

Snowdon, B. (2004a), 'Beyond the Ivory Tower: Stanley Fischer on the Economics of Contemporary Global Issues', *World Economics*, Vol. 5, No. 1 (January–March).

Snowdon, B. (2004b), 'Explaining the "Great Divergence": Daron Acemoglu on How Growth Theorists Rediscovered History and the Importance of Institutions', *World Economics*, Vol. 5, No. 2 (April–June).

Snowdon, B, and H. R. Vane (2005), *Modern Macroeconomics: Its Origins, Development and Current State*, Cheltenham: Edward Elgar.

Stern, N., J. Dethier and F. Rogers (2005), *Growth and Empowerment: Making Development Happen*, Cambridge, MA: MIT Press.

Svensson, J. (2000), 'Foreign Aid and Rent Seeking', *Journal of International Economics*, August.

Todaro, M. P. and S. C. Smith (2003), *Economic Development*, New York: Addison Wesley.

United Nations (2005), *The Millennium Development Goals Report 2005*, New York: United Nations.

White, H. (1992), 'The Macroeconomic Impact of Development Aid: A Critical Survey', *Journal of Development Studies*, January.

Woglin, J. M. (1997), 'The Evolution of Economic Policymaking in Africa', American Economic Review, May.

World Bank (1997), The State in a Changing World, Oxford: Oxford University Press.

World Bank (1998), Assessing Aid: What Works, What Doesn't and Why, Oxford: Oxford University Press.

World Bank (2002), Building Institutions for Markets, Oxford: Oxford University Press.

World Bank (2005), A Better Investment Climate for Everyone, Oxford: Oxford University Press.

Ying, X. (2003), Economic Development and the Division of Labour, Oxford: Blackwell.